SHOUT
SHARE
IT

1838

TURTON'S

BRITISH FAUNA.

CONTAINING

Page P

MAMMALIA .... 5 to 17

BIRDS 18 77

AMPHIBIA 78 81

FISHES 82 117

WORMS 118 30

Price 10s. 6d.

British Birds
List by Henry Doubleday. 1836

Whole number killed or taken
in Great Britain is 323. –
viz
Raptores 30
Insessores to 117.
Rasores to 17
Grallatores 66.
& the Natatores to 93 –

Nat Lib Vol 9. p. 76

British Ornithology
by P J Selby from 1826 to 1833
2 vols fol with 8vo Letter press
descriptions -

327 Species of British
Birds finished the size of life
with but few exceptions.

See a Notice of British
Works on Birds
Nat Lib. Vol 17 - p. 82.

According to Audubon there are 470 spec of N A Birds -

Turtons Fauna 1807 -
gives of British Birds. 294. p. 77 -
and in the [illegible] one more
or 295 - as the number of
British birds then known -

Pike bought in [illegible]
Many years since in
a small stream
25 pounds weight
[illegible] Mr Fenner
Gold 17 times greater than
water In Pyr 7½
Copper Pyr 4 3
Mica 3 –

30 82
28 35

2 47

Corvus frugilegus. Tarlay p. 30 –
Rook – Penny Mag. Vol. 8 – p. 35.
Wings 38. inches
length 19 inches
Weight 19 ounces –
Mr Mudie –

30 8
40 32

[illegible] 42
3962

BRITISH FAUNA,

CONTAINING

A COMPENDIUM

OF

The ZOOLOGY

OF THE

BRITISH ISLANDS:

ARRANGED ACCORDING TO THE

LINNEAN SYSTEM.

By W. TURTON, M. D. F. L. S.

VOL I.

INCLUDING THE CLASSES

MAMMALIA, BIRDS, AMPHIBIA,
FISHES, and WORMS.

> *Consultum tamen erit hoc prinicipio, Domi magis quam foris uti, ne inusitata rerum admiratio nimiam ignorantiam prodamus, et sic nostram nationem exponamus cantemptui et risui exterorum.* LINNE.

SWANSEA:

PRINTED BY J. EVANS, WIND-STREET.

1807.

QL
255
T87
1807
SCNHRB

148601

PREFACE.

PERFECTION, says the scholiast, is the first in intention and the last in execution.

To Man, "the last and best of all God's works," has alone been committed the power of collection, arrangement, discrimination, and description.

Whatever materials conjunctly compose the whole of the globe he inhabits, are individually the objects of investigation to the philosopher and the naturalist: for as the whole is composed of the parts, the most humble and minute of created substances holds its effective rank in this great and august assemblage.

The various subjects of creation are arranged into the three KINGDOMS of ANIMALS, VEGETABLES and MINERALS. These several Kingdoms are distributed into CLASSES, which are reduced into ORDERS: the orders are divided into GENERA or families, ultimately subdivided into SPECIES or individuals, with their accidental *varieties*.

Local arrangements, systematically exhibited, have ever been considered as highly subservient to a general knowledge of natural history; inasmuch as by the contemplation of a smaller range, the various objects contained in it may be more accurately examined and described.

The Fauna of the British Islands, has hitherto been only attempted, according to the Linnéan system, in the imperfect Synopsis of Berkenhout.

The Author has therefore gathered together in a compendious and portable form, whatever he has had an opportunity autopsically to examine and describe, or collect from the labours of modern individuals and societies.

No alteration has been made in the amended classification of Linné, except that the Worms are placed before the Insects, both as having a more natural alliance with the preceding classes, and as forming a more commodious division of the work.

It is the intention of the author, numine concedente, as his leisure and opportunities will allow, to proceed in the same form and manner with the remaining departments in the natural history of these Islands, of Insects, Vegetables, and Minerals; and which will probably be comprised in three more volumes.

Finis Creationis est gloria Dei ex opere
Naturæ, per Hominem solum.

SWANSEA, *Jan.* 1, 1807.

CLASS I. MAMMALIA.

Animals suckling the young.

ORDER I. PRIMATES.

Front-teeth formed for cutting: tusks one on each side in each jaw: teats 2, seated on the breast.

1. Homo. *Front-teeth* 4 in each jaw, placed close together: *canine-teeth* placed close to and of equal length with the rest: *grinders* obtuse.
2. Vespertilio. *Teeth* all erect, pointed, placed close together: *fore-feet* palmate with a membrane which surrounds the body and gives the power of flight.

ORDER II. FERÆ.

Front teeth generally 6 *in each jaw, rather conic: canine-teeth one or more on each side in each jaw: grinders with conic projections: feet armed with sharp claws.*

3. Phoca. *Front-teeth* in the upper-jaw 6, the outer-ones larger; in the lower-jaw 4, more obtuse, and equal: *canine-teeth* one each side in each jaw, longer and larger than the rest, the upper-ones distinct from the cutting teeth, the lower-ones from the grinders: *grinders* 5 each side above, 6 below, narrow, tricuspidate: *hind-feet* placed at the extremity of the body, and uniting into a fin.
4. Canis. *Front-teeth* in the upper-jaw 6, the lateral-ones longer and distant, the intermediate-ones lobed; in the lower-jaw 6, the lateral-ones lobed: *canine-teeth* one in each jaw each side, incurved: *grinders* 6 or 7, or more than in the other genera of this order.
5. Felis. *Front-teeth* 6, the intermediate-ones equal: *grinders* 3 on each side: *tongue* armed with prickly protuberances pointing backwards: *claws* retractile.
6. Viverra. *Front-teeth* 6, rather acute: *canine-teeth* longer than the others: *grinders* more than 3 each side: *tongue* smooth or prickly: *body* long and slender: *feet* not webbed.
7. Lutra. *Front-teeth* 6, rather acute: *canine-teeth* longer than the others: *grinders* more than 3 each side: *tongue* smooth: *feet* webbed.
8. Ursus. *Front-teeth* in the upper-jaw 6, hollowed within; in the lower-jaw 6, the two lateral-ones longer than the rest and lobed, with smaller-ones at their

base internally; *canine-teeth* solitary: *grinders* 5 or 6 each side, the first placed close to the canine-teeth: *tongue* smooth: *snout* prominent: *eyes* furnished with a nictitant membrane.

9. Talpa. *Front teeth* in the upper-jaw 6, unequal; in the lower-jaw 8: *canine-teeth* solitary, the upper-ones larger: *grinders* 7 in the upper-jaw, 6 in the lower.

10. Sorex. *Front-teeth* in the upper-jaw 2, long, cloven; in the lower-jaw 2 or 4, the intermediate-ones shorter: *canine-teeth* several each side: *grinders* cuspidate.

11. Erinaceus. *Front-teeth* in the upper-jaw 2, distant; in the lower-jaw 2, close together: *canine-teeth* 5 each side in the upper-jaw, and 3 in the lower: *grinders* 4 each side in each jaw: *body* covered with spines on the upper parts.

ORDER III. GLIRES.

Front-teeth 2 in each jaw, close together, remote from the grinders: canine teeth none.

12. Castor. *Front-teeth* in the upper-jaw truncate, and hollowed in a transverse angle; in the lower-jaw transverse at the tips: *grinders* 4 on each side: *tail* long, depressed, scaly: *clavicles* or collar-bones perfect.

13. Mus. *Front-teeth* of the upper-jaw wedge-shaped: *grinders* 3 each side, rarely only 2: *clavicles* perfect.

14. Sciurus. *Front-teeth* of the upper-jaw wedge-shaped, of the lower acute: *grinders* 5 each side in the upper-jaw, 4 in the lower: *clavicles* perfect: *tail* spreading towards each side.

15. Myoxus. *Front-teeth* of the upper-jaw wedge-shaped, of the lower compressed: *grinders* 4 in each jaw: *whiskers* long: *tail* round, hairy, thicker towards the tip: *legs* of equal length: *fore-feet* 4-toed.

16. Lepus. *Front-teeth* of the upper-jaw furnished with two smaller ones placed behind them.

ORDER IV. PECORA.

Front-teeth wanting in the upper-jaw; in the lower 6 or 8, very remote from the grinders: feet with cloven-hoofs.

17. Cervus. *Horns* solid, branched, annual, covered while young with a hairy skin: *front-teeth* in the lower-jaw 8: *canine-teeth* none, or a single one in the upper-jaw.

18. Capra. *Horns* hollow, pointing upwards and turned back, compressed, rough, nearly close together at the

DSI

base: *front-teeth* in the lower-jaw 8: *canine-teeth* none: *chin* of the male bearded.

19. Ovis. *Horns* hollow, wrinkled, turned backwards and spirally twisted inwards: *front-teeth* in the lower-jaw 8: *canine-teeth* none.
20. Bos. *Horns* hollow, smooth, turned outwards and forwards, crescent-shaped: *front-teeth* in the lower-jaw 8: *canine-teeth* none.

ORDER V. BELLUÆ.

Front-teeth obtuse, truncate: feet hoofed.

21. Equus. *Front-teeth* in the upper-jaw 6, parallel; in the lower-jaw 6, rather projecting: *tusks* one each side in each jaw, remote from the rest: *hoofs* undivided.
22. Sus. *Front-teeth* in the upper-jaw 4, converging; in the lower 6, projecting: *tusks* in the upper-jaw 2, rather short; in the lower 2, long, and at length exserted: *hoofs* cloven.

ORDER VI. CETE.

With spiracles, or breathing holes, on the forepart of the head: feet none: pectoral fins without claws: tail placed horizontally.

23. Monodon. *Head* furnished with one or two long spirally twisted teeth, projecting straight forwards, like horns, through the upper lip: *spiracle* on the head.
24. Balæna. *Teeth* none, instead of which are horny laminæ in the upper-jaw: *spiracle* with a double orifice, on the top of the head.
25. Physeter. *Teeth* visible in the lower-jaw only: *spiracle* on the head or snout.
26. Delphinus. *Teeth* visible in each jaw: *spiracle* on the head.

CLASS I. MAMMALIA.

ORDER I. PRIMATES,

1. HOMO. *Man.* The image of his creator.

2. VESPERTILIO. *Bat.*

1. V. *auritus.* Front-teeth in the upper-jaw 4, in the lower 6: tailed; nose without appendages: ears double, larger than the head.

Long-eared Bat. *Pennant Zool. tab* 13. *n.* 40.

Length barely 2 inches: *expansion* of the wings 7 inches.

Body reddish mouse-colour: *ears* more than an inch long, rounded at the ends, with smaller supplemental ones within them, thin, nearly transparent.

2. V. *murinus.* Front-teeth in the upper-jaw 4, in the lower 6: tailed; nose without appendage: ears less than the head.

Common Bat. *Edwards, tab.* 201. *f.* 2.

Length 2 inches and a half, *extent* 9 inches.

Body mouse-coloured with a red tinge: *wings* and *ears* blackish: *ears* small, rounded.

3. V. *Noctula.* Front-teeth in the upper-jaw 4, in the lower 6: tailed; nose without appendage: ears oval, with small valves.

Great Bat. *Penn Brit. Zool. tab.* 13. *n.* 38.

Length 4 inches and a half: *extent* 14 or 15 inches.

Body chesnut, glossy,: *nose* slightly 2-lobed: *mouth* simple: *chin* with a minute wart: *ears* small, rounded.

4. V. *Barbastellus.* Front teeth in the upper jaw 4, in the lower 6: tailed; cheeks tumid, hairy: ears large, angular near the base: forehead bald.

Barbastelle Bat. *Sowerby Brit. Miscel. tab.* 5.

Length 2 inches, *extent* of wings about 10.

Body dusky-brown, paler beneath: *teeth* all notched, except the canine: *fore-head* flat and bald: *nose* smooth and concave: *ears* nearly surrounding the eyes, as long as the head, notched at each edge, undulate on the outer margin, hairy on the back, appendaged within.

5. V. *Ferrum equinum.* Front-teeth in the upper-jaw none, in the lower 4: nose horse-shoe-shaped: ears without appendage, as long as the head: tail half as long as the body.

Horse-shoe Bat. *Pennant. Brit. Zool. tab.* 14. *n.* 39.

Length 3 inches and a half, *extent* of wings 14.

Body deep cinereous on the upper parts, whitish below: *nose* furnished with an upright membrane shaped like a horse-shoe: *ears* large, acute, broad at the base, remote from the eyes, inclining backwards, not appendaged within; *tail* pointed.

ORDER II FERÆ,

3. PHOCA. *Seal.*

6. **Ph. *vitulina.* Brown, without ears: head and neck smooth.**

Common Seal, Sea Calf. *Br. Zool. tab.* 12. *Shaw Zool.* 1. *tab.* 70.

Body 5 or 6 feet long, tapering from the shoulders, various shades of brown, often spotted, clothed when young with thick-set hair; *head* short, large and round, furnished with whiskers each side the mouth and over the eyes, the hairs of which have alternate contractions and dilatations: *eyes* large, black, furnished with a nictitant membrane: *external ears* none, in the place of which are two small orifices: *tongue* cloven: *legs* short, webbed, 5-toed, with strong slender claws slightly incurved at their tips; the hinder-ones pointing backwards and placed close togteher: *tail* shorter than the hind legs.

7. Ph. *barbata*. Blackish, without ears: head smooth.

Great Seal. *Shaw Zool. t.* 74. *Phil. Trans. n.* 469. *t.* 1.

Greatly resembles the last, but grows to the length of 12 feet, and is of an uniformly blackish colour.

4. CANIS. *Dog.*

8. C. *familiaris*. Tail bent backwards, and leaning towards the left.

Found of many sizes and varieties, the original animal of which is supposed to be the Shepherd's dog, distinguished by its erect ears, and tail very wooly underneath.

Head carinate on the crown: *lower-lip* hid by the upper, indented and naked at the sides: *whiskers* in 5 or 6 rows: *nostrils* turned outwards into a semilunar furrow: *ears*, the upper margin reflected, anterior 3-lobed, posterior doubled: *face* with 7 hairy warts: *teats* 10, 4 of which are on the breast: *fur* with 8 ridges, on the neck, breast, fore-legs, belly, eyes, loins, ears, and near the anus: *feet* slightly palmate, with sometimes a spurious toe or two behind.

9. C. *Lupus*. Pale yellowish-grey: tail bent inwards, bushy, tipt with black.

Wolf. *Pennant Brit. Zool.* 1. *tab.* 6.

Body about as large as a Greyhound, pale brown with a yellowish tinge: *head* and *neck* cinereous: *head* long: *nose* pointed: *ears* sharp, erect: *teeth* large: *legs* long: *hair* rather long.

10. C. *Vulpes*. Yellowish-brown, whitish beneath: tail straight, bushy, tipt with white.

Fox. *Schreber* 3. *p.* 345. *tab.* 90.

Head broad, forehead flat: *nose* sharp: *ears* erect, sharp, tipt with black: *eyes* rather oblique: *lips* white: *fore-feet* black.

5. FELIS. *Cat.*

11. F. *Catus*. Tail long, barred with distinct rings: forehead with 7 stripes between the ears.

Cat. *Johns. Quadrup. t.* 72. *Buffon* 6. *p.* 20. *t.* 1.

Body when in a wild state yellowish-grey with blackish stripes, 3 disposed longitudinally on the back, those on the sides spiral: tip of the *nose* and *lips* black: *ears* smooth, rounded: soles of the *feet* black: *claws* horn-colour, curved.

6. VIVERRA. *Weesel.*

12. V. *Foina*. Blackish chesnut: throat and breast white.

Martin. *Brit. Zool. tab.* 6. *n.* 15. *Buffon.* 7. *pl.* 15

Body about 18 inches long, blackish tawny, paler beneath: *head* small, reddish-brown: *ears* broad, rounded: *eyes* lively: *hair* of the body cinereous at the bottom, bright chesnut in the middle, and tipt with black: *tail* full of hair, darker than the body, about 10 inches long: *palms* of the feet clothed with thick down: *claws* white, sharp.

13. V. *Martes.* Blackish-chesnut, throat and breast yellow

Pine Martin. *Buffon.* 7. *pl.* 22.

Differs from the last in having the *throat* and *breast* yellow, the *head* shorter, the *hair* rather darker, and the *legs* a little longer.

14. V. *Putorius.* Blackish-yellow, mouth and ears white.

Polecat, Fitchet. *Penn. Zool. pl.* 6. *Shaw Zool. pl.* 98.

Body about 17 inches long: *head* thicker than in the Martin: *mouth* of the male whitish, of the female yellowish-white: *ears* edged with white: *tail* 6 inches long, taper: *legs* short: *toes* long, cloven to the bottom.

15. V. *vulgaris.* Pale reddish-brown above, beneath white: tail the colour of the body.

Common Weeſel. *Penn. Zool. pl.* 7. *n.* 17. *Shaw Zool. pl.* 98.

Body 6 or 7 inches long, pale tawny-brown on the upper parts, from the chin to the tail white on the under-side: *ears* small round: below the corner of the *mouth* on each jaw is a brown spot: *eyes* black: *tail* 2 inches and a half long, pointed.

2. White with a few black hairs on the end of the tail.

16. V. *erminea.* Tail tipt with black.

1. Body pale reddish brown. *Stoat.*
2. Body white. *Ermine.*

Pennant Brit. Zool. tab. 7. *n.* 18. *Shaw Zool. t.* 99.

Body 10 inches long, pale reddish-brown or white, or white in some parts and brownish in others: edges of the *ears* and ends of the *toes* yellowish-white: *tail* 5 inches and a half long, always black on the lower part: *hair* short, and not so shining as in the Martin.

7. LUTRA. *Otter.*

17. L. *vulgaris.* Deep-brown, with 2 whitish spots on each side the nose, and one under the chin: feet naked: tail half as long as the body.

Otter. *Penn. Brit. Zool. pl.* 8. *n.* 19. *Shaw Zool. pl.* 100.

Body nearly 2 feet long: *head* broad, flat: *mouth* small, furnished with strong whiskers: *lips* thick: *ears* short, rounded; *neck* very thick: *throat* and *breast* cinereous: *eyes* small, placed over the nose: *legs* short, thick, destitute of hair: *toes* 5 on each foot, all connected by strong webs: *tail* 16 inches long, tapering, compreſsed.

8. URSUS. *Bear.*

18. U. *Arctos.* Blackish-brown, with a very short tail.

Common Bear. *Shaw Zool. pl.* 102. *Buffon* 8. *pl.* 31. 32.

Body about the size of a large calf, black to various shades of brown and grey, very shaggy; *head* tapering suddenly into the snout: *ears* short, rounded: *toes* 5 on each foot: *thumb* narrower than the rest.

19. U. *Meles.* Grey above, black underneath; a longitudinal black bend covering the eyes and ears; tail the colour of the body.

Badger. *Pennant Zool. t.* 18. *n.* 13. *Shaw Zool. t.* 106.

Body about 2 feet long, of a clumsy make, grey on the upper parts, with the *throat, breast, belly,* and *legs* black: *face* white, with a black pyramidal band extending from below the eyes over the ears: *eyes* very small: *ears* short, rounded: *legs* short, thick: *claws* on the forefeet long and straight: *tail* 6 inches long, between which and the vent is a transverse orifice exuding a white fetid substance.

9. TALPA. *Mole.*

20. T. *europæa.* Tail short: all the feet 5-toed.

Common Mole. *Shaw Zool. t.* 117. *Buffon* 8. *t.* 12.

Body hardly 6 inches long, thick, cylindrical, generally of a fine gloſsy black colour: *snout* slender: *eyes* extremely small, entirely hid in the skin: external *ears* none: *feet* extremely short, the fore-ones larger and inclining sideways; hind-ones pointing backwards: *claws* large and strong: *tail* an inch long: *skin* very tough, soft and silky.

10. SOREX. *Shrew.*

21. **S. *araneus.* Reddish-brown, dirty-white underneath: tail hardly as long as the body.**

Common Shrew. *Shaw Zool. t.* 118. *Buffon* 8. *t.* 10. *f.* 1.

Body about 2 inches and a half long, brownish with a ferruginous tint on the upper parts, whitish beneath: *snout* long and sharp-pointed, the upper jaw much longer than the under, and beset with long fine whiskers: *eyes* small and almost hid in the fur: *ears* short, rounded: *tail* about 2 inches long, covered with short dusky hairs: *legs* short, the hind-ones longer and placed close to the tail.

22. **S. *fodiens.* Blackish, grey underneath: beneath the tail a triangular dusky spot: toes fringed: tail shorter than the body.**

Water Shrew. *Penn. Zool. t.* 11. *Shaw Zool. t.* 118.

Body 3 inches and three quarters long, black on the upper parts, pale ash-colour underneath, the throat and breast sometimes pale ferruginous: *whiskers* long, ash-colour: *eyes* almost hid in the fur: *ears* minute, with a tuft of white hairs within: *legs* and *feet* white.

23. **S. *ciliatus.* Entirely greyish-black: tail and toes with a white fringe underneath.**

Fringe-tailed Water Shrew. *Sow. Brit. Misc.* 1. *pl.* 49.

Body about the size of the last, entirely blackish, and scarcely lighter underneath: *tail* with a fringe of white hairs underneath.

11. ERINACEUS. *Hedge-hog.*

24. **E. *europæus.* Ears short, broad, rounded: nostrils bordered each side with a loose flap.**

Hedgehog. Urchin. *Penn. Quad. t.* 48. *f.* 3. *Shaw Zool. t.* 121.

Body about 10 inches long, shaped like a hog: *snout* tapering, flat at the end, dusky and covered with a few hairs; the upper-lips cloven: *ears* hairy: *eyes* small, black, placed high in the head: *hair* of the head yellowish mixed with white; of the neck, feet, body, and tail darker, of the breast and belly the same with a yellowish mixture: *legs* short, dusky, nearly bare: *toes* long, divided the whole way; the thumb much shorter than the rest: *claws* long, weak: *spines* about an inch long, black in the middle and white at both ends; *tail* about an inch long.

ORDER III. GLIRES.

12. CASTOR. *Beaver.*

25. **C. *Fiber.* Deep chesnut: tail ovate, nearly flat, naked.**

Beaver. *Br. Zool. t.* 9. *Shaw Zool. t.* 128.

Body about 3 feet long, thick and very convex on the back: *snout* obtuse: *eyes* small: *ears* short, covered with fur: *neck* short, thick: *feet* 5-toed, the hind-ones webbed: *tail* nearly a foot long, and 3 inches broad, covered with hair for about the fourth of its length: the remaining part naked and scaly like a fish, a little convex near the base.

13. MUS. *Mouse.*

26. **M. *decumanus.* Tawny-grey, whitish underneath: tail very long, scaly: hairs of the body bristly.**

Norway Rat. *Shaw Zool. t.* 130. *Buffon* 8. *t.* 27.

Body 9 inches long: *head* a little rounded in front; end of the *nose* whitish; *eyes* large black, prominent: *feet* and *legs* pale dirty flesh-colour, nearly naked; the fore-feet 4-toed with an additional claw: *tail* 7 inches and a half long, covered with minute scales mixed with a few hairs, and consisting of about 200 rings.

27. M. *Rattus.* Deep greyish-black, ash-coloured beneath: tail very long, scaly.

Black Rat. *Shaw Zool. t.* 130. *Buffon* 8. *t.* 27.

Body 7 inches long: *head* gradually tapering to the nose; *legs* dusky, nearly naked; fore-feet 4-toed with an additional claw: *tail* 8 inches long, consisting of about 250 rings.

28. M. *Musculus.* Brown, ash-coloured underneath: tail long, nearly naked: fore-feet 4-toed, hind-feet 5-toed.

Common Mouse. *Br. Zool. t.* 11. *Shaw Zool. t.* 131.

Body 3 inches and a half long, sometimes varying in colour to blackish, yellowish, spotted, or entirely white, with red eyes: *thumb* of the hind-feet without claw: *tail* as long as the body, scaly, nearly destitute of hair.

29. M. *sylvaticus.* Yellowish-brown, white underneath: breast white: tail long, nearly naked.

Wood Mouse. *Shaw Zool. t.* 132. *Buffon* 7. *n.* 41.

Body about 4 inches and a half long, yellowish-brown above, whitish beneath, the colours being distinctly separated on the sides; sometimes entirely white with red eyes: *head* rounded: *snout* rather obtuse: *eyes* large, black: *legs* and *feet* white: *tail* 4 inches long, slightly clothed with hair, blackish above, whitish underneath.

30. M. *messorius.* Rusty-brown, white underneath, a straight line along the sides dividing the colours: tail long, scaly: ears longer than the fur.

Harvest Mouse. *Brit. Zool. n.* 29. *Shaw Zool.* 2 *vign.*

Body 2 inches and a half long, weighing about the sixth of an ounce, a straight line along the sides dividing the colours of the back and belly: *ears* naked: *tail* 2 inches long.

31. M. *amphibius.* Blackish-brown, cinereous underneath: ears hardly above the fur: feet 3-toed with the rudiment of a fourth: tail about half as long as the body.

Water Rat. *Shaw Zool. p.* 73. *pl.* 129.

Body nearly 7 inches long, varying in size and colour: *head* large: *nose* thick, obtuse: *eyes* small: *ears* rounded, concealed in the fur: *hind-feet* sometimes 5-toed: *tail* about 4 inches long, covered with short black hair, whitish at the tip.

32. M. *arvalis.* Dusky-ferruginous, deep grey underneath: ears longer than the fur: fore-feet 3-toed, with the rudiment of a fourth: tail very short.

Meadow Mouse. *Shaw Zool. t.* 136. *Buffon* 7. *t.* 47.

Body 2 inches long, sometimes entirely blackish-grey: *head* large: sloping: *snout* obtuse: *eyes* prominent: *ears* reaching a little beyond the fur: *legs* very short: *tail* dusky, an inch and a half long, covered with short hair ending in a small tuft.

14. SCIURUS. *Squirrel.*

33. S. *vulgaris.* Reddish-brown, white underneath: ears tipt with a pencil of hairs: tail the colour of the back.

2. Tail pure white.

Common Squirrel. *Jonst. Quad. t.* 66. *Buffon* 7. *t.* 32.

Body about 8 inches long, bright chesnut brown, with the breast and belly white; *eyes* large, black, lively: *ears* erect, with long tufts of hair of a deeper colour than the body: *legs* short, strong;

fore-feet 4-toed, with an additional claw : *hind-feet* 5-toed : *toes* long : *claws* strong and sharp : *tail* about 7 inches long, clothed with long hair which is generally spread on each side.

15. MYOXUS. *Dormouse.*

34 M. *muscardinus*. Tawny-red, with the throat whitish : thumbs of the hind-feet without claws.

Common Dormouse. *Shaw Zool. t.* 154. *Buffon* 8. *t.* 26.

Body about 3 inches long, plumper than that of the mouse : *eyes* large, black, prominent : *ears* broad, rounded, thin, semitransparent : *tail* 2 inches and a half long, closely covered with hair, rather bushy at the tip.

16. LEPUS. *Hare.*

35. L. *timidus*. Pale rusty-brown, the chin and belly white : tail very short : ears longer than the head, tipt with black.

Common Hare. *Shaw Zool. t.* 162. *Buffon* 6. *t.* 38.

Body about 2 feet long, of a rather slender make : *throat* and *breast* ferruginous : *head* oblong : *mouth* clothed with ſhort hair on the inside : *upper-lip* cloven : *nostrils* moiſt, moveable : *eyes* large, yellowiſh brown, placed much outwards, furniſhed with a nictitant membrane : *whiskers* long, white : *fur* on the face, back and ſides, white at the roots, black in the middle, tawny-red at the ends : *hind-legs* longer than the fore : *feet* covered underneath with fur : *tail* black above, white underneath.

36. L. *variabilis*. Tawny-grey, becoming pure white in the winter, except the tips of the ears and soles of the feet, which remain black : tail very short : ears shorter than the head.

2. The ſides only turning white in the winter.

Alpine Hare. *Pennant Brit. Zool. tab.* 10. *n.* 21.

Body leſs than the laſt, in the ſummer the *head* greyiſh-tawny, *ears* and *back* tawny slightly mixed with black, *neck* inclining to ash-colour, *sides* becoming gradually whiter downwards, *belly* white, *ſoles* black and thickly covered with yellowish fur ; *tail* compoſed of fewer joints.

37. L. *Cuniculus*. Ears tipt with black : hind-legs shorter than the body : tail short, nearly the colour of the body.

Rabbet. *Pennant Zool. t.* 10. *Shaw Zool. t.* 162.

Body about 18 inches long, in a wild ſtate dusky-brown paler underneath, varying much in colour when domeſticated : *ears* shorter than the head and more rounded : *tail* black above, white underneath.

ORDER IV. PECORA.

17. CERVUS. *Deer.*

38. C. *Elaphus*. Reddish-brown, whitish underneath : horns branched, cylindrical, slightly bending backwards.

Stag, Red Deer. *Shaw Zool. t.* 177. *Buffon* 6. *t.* 9. 10.

Body about 3 feet and a half high, varying in size and colour, the younger-ones ſpotted with white : under the *eyes* on each side a diſtinct lachrymal furrow : *ears* long, pointed : *horns* a little flexuous, with sharp pointed ramifications varying in number.

39. C. *Dama*. Yellowish-brown, whitish underneath : horns compressed, branched, palmate at top, slightly recurved.

Fallow Deer. *Shaw Zool. t.* 178, 179. *Buffon* 6. *t.* 27, 28.

Body much ſmaller than the ſtag, brownish bay, whitish underneath on the inside of the limbs and beneath the tail, ſometimes ſpotted, rarely entirely white: *ears* oval, pointed: *horns* flattened and dilated towards the tips where they are cut into ſeveral short branches: *tail* ſomewhat longer than that of the ſtag, bounded each side by a deſcending black line.

40. C. *Capreolus.* Reddish-brown, whitish underneath: horns erect, cylindrical branched, cloven at their tips.

Roe, Roebuck. *Brit. Zool. t.* 4. *Buffon* 6. *t.* 32, 33.

Body 3 feet 9 inches long, 2 feet 3 inches high before, and 2 feet 7 inches behind, weighing 50-60 pounds: *horns* 8 or 9 inches long, divided into 3 branches, longitudinally grooved in the lower part and very rugged: *fur* during the winter very long, the lower part of the hairs ash-colour with a narrow black bar near the end and tipt with yellow: hairs of the *face* black tipt with grey: *ears* long, pale yellow withinside, and covered with long hair; ſpaces about the *eyes* and *mouth* black: *breast*, *belly*, *legs*, and inside of the *thighs* yellowish-white: *rump* pure white: *legs* slender, with a tuft of long hair on the outside of the hind-leg below the joint: *tail* an inch long.

18. CAPRA. *Goat.*

41. C. *Hircus.* Horns carinate, bowed back, turning outwards towards the ends: chin bearded.

Common Goat. *Brit. Zool. t.* 3. *Shaw Zool. t.* 199.

Body varying in colour, but mostly various shades of grey, white or ſpotted: *head* thick: *horns* with a longitudinal ridge: *neck* and *limbs* robuſt: *tail* short, black.

19. OVIS. *Sheep.*

42. O. *Aries.* Horns compreſsed, twisting spirally outwards.

1. Without horns: tail hanging as low as the knees.
2. Without horns: noſe turned udwards: under jaw much protruded.
3. Horned: tail short: wool short, coarſe.

Common Sheep. *Johnst Quad. t.* 22. *Buffon* 5. *t.* 1. 2.

Body varying much in colour and size: *horns* large, wrinkled, angular with longitudinal ridges, turned backwards into a compreſsed ſpiral ſcrew-like twiſt which comes down to the sides of the head after ſeveral turns: *eyes* bluish, with a large oblong pupil, and a deep furrow before the inner corner: *tail* round, frequently reaching to the knees.

20. BOS. *Ox.*

43. B. *Taurus.* Horns cylindrical, curving outwards: dewlaps lax, pendent.

2. Without horns.

Bull, Cow. *Brit. Zool. t.* 2. *Shaw Zool. t.* 205.

Body varying exceedingly in size and colour: *tail* ſometimes ending in a tuft.

ORDER V. BELLUÆ.

21. EQUUS. *Horse.*

44. E. *Caballus.* Hoofs solid: mane long, flowing: tail uniformly covered with long hair.

Horſe. *Brit. Zool. t.* 1. *Shaw Zool. t.* 214, 215.

Body exceedingly variable in size and colour: *head* ſmall, tapering: *ears* erect, pointed, not reaching to the eyes: *nostrils* very dilatable: *neck* ſmall, tapering to the head: *legs* with a naked calloſity on the inſide above the knee on the fore-ones, and another juſt under the knee on the hind-ones.

45. E. *Aſinus.* Hoofs solid: over the shoulders a blackish cross: tail with long bristly hair at the extremity.
2. The hybrid produce of a male Aſs and a Mare. *Mule.*
3. The hybrid produce of a Horſe and a female Aſs. *Hinny.*
Aſs. *Shaw Zool. t.* 216. *Buffon* 4. *t.* 11.
Body leſs and more clumſy than that of the horſe: *head* shorter and thicker: *ears* slouching and reaching beyond the eyes: *neck* thick: along the *back* a blackiſh ſtripe which is croſsed by another on the shoulders: *tail* tipped with long hair: *legs* with a naked calloſity on the inſide above the knee on the fore-ones, but not on the hind-ones.

22. SUS. *Swine.*

46. S. *Scrofa.* Body bristly on the fore-part: tail hairy.
2. Hoofs undivided.
Common Hog. *Shaw Zool. t.* 221, 222. *Buffon* 5, *t.* 14, 16. 17.
Body thick and clumſy: *ears* oblong, acute: *ſnout* cartilaginous, truncate: *tail* clothed with hairs, shorter than the hind legs.

ORDER VI. CETE.

23. MONODON. *Narwhal.*

47. M. *Monoceros.*
Sea Unicorn. *Sow. Brit. Miſcel. t.* 9. *Shaw Zool. t.* 225.
Body 25 feet long, blackiſh on the back, white on the sides and belly with black ſpots and ſtreaks gradually tapering to the tail: *teeth* projecting through the upper jaw, ſometimes one ſometimes two, about 7 feet and a half long, taper, pointed, very hard. white or yellowiſh-white, ſpirally twiſted, with a slight groove: *mouth* rather ſmall: *front* of the head very obtuſe and rounded: *ſpiracle* doubled within: *eyes* ſmall, black, placed about half way down: *tongue* long: *pectoral fins* ſmall, black: *back* with the rudiment of a fin, and near the tail a hard ridge: *tail* with oblong lobes.

24. BALÆNA. *Whale.*

48. B. *Myſticetus.* Spiracles serpentine, on the middle of the head: back without fin.
Common Whale. *Shaw Zool. t.* 226. *Nat. Miſc.* 4. *t.* 133.
Body from 50 to 90 feet long, generally black above and white beneath: *head* conſtituting nearly a third part of the whole body; upper-jaw obtuſe and much narrower than the lower; lower-jaw pointed, and broader in the middle: *mouth* immenſe, long, curved like the letter *ſ*: *tongue* ſoft, adhering to the lower-jaw, white with black ſpots at the sides: *upper-jaw* furniſhed at the sides with a regular ſeries of broad horny hairy plates, called Whalebone: *eyes* ſmall, placed near the angles of the mouth: *ſpiracles* ſeated on a protuberance near together, and bent like the letter *S*: *pectoral-fins* broad, pointed, ſeated under the angles of the mouth: *tail* with rather acute lobes, from the middle of which a sharpish angular ridge runs up the middle of the back to about a third its length.

49. B. *Physalus.* Spiracles on the middle of the head: back with a fatty fin towards the lower extremity.
Fin-fish. *Shaw Zool. t.* 227. *Mart. Spitſb. p.* 125. *tab.* 2.
Body equal in length to the whale but much more slender, clear brown on the upper-part, white below: *lips* brown, with numerous oblique plaits like a twiſted rope: *upper-jaw* furniſhed with laminæ of whalebone, shorter and ſmaller than in the whale, of a blueiſh colour: *ſpiracles* ſeated on a ſmall prominence: *eyes* placed far aſunder as in the laſt, near the angles of the mouth: *pectoral-fins* a

B 2

little behind the eyes: *dorſal-fin* 3 or 4 feet long, a little falcate, acute: lobes of the *tail* lanceolate.

50. B. *Boops*. Spiracles placed on the snout: back with a cartilaginous protuberance near the tail.

Pike-headed Whale. *Shaw Zool. t.* 227.

Body about 46 feet long, and 20 in circumference, black above, white beneath: *belly* with numerous longitudinal plaits which are red on the inside: fore-part of the *back* convex and sloping down to the ſnout; *upper-jaw* a little rounded, furnished with numerous laminæ of whalebone about a foot long: *lower-jaw* rather narrower and acute; *tongue* 5 feet long, wrinkled, liver-coloured: *noſtrils* with 3 rows of circular convexities before them: *eyes* placed behind the ſpiracles: *ears* minute, behind the eyes: *ſpiracles* ſeparated by a thin partition: *pectoral-fins* large, obovate-oblong, with rounded crenatures on the anterior part: *dorſal-fin* of a fatty-cartilaginous substance, placed above the vent, nearly perpendicular, behind which is a sharp ridge reaching to the tail: lobes of the *tail* oblong, slightly pointed.

51. B. *Musculus*. Spiracles on the front: lower-jaw much wider than the upper.

Round-lipped Whale. *Sib. Phalain.* 33. *tab. T.* 3.

Body 78 feet long, and 35 in circumference, black above, white beneath: *lower-lip* much broader than the upper, ſemicircularly turned up, with black laminæ of whalebone about 3 feet long: *upper-lip* rather pointed: *tongue* 15 feet and a half long; *ſpiracles* pyramidal, on the forehead: *pectoral-fins* 10 feet long; *dorſal-fin* fat, about 3 feet high: *tail* 18 feet broad: *belly* full of plaits.

52. B. *rostrata*. Snout elongated, gradually tapering to a point: dorsal-fin fatty.

Roſtrated Whale. *Shaw Natural Miſcel.* 9. *tab.* 304.

Body about 25 feet long, very thick, dark blueish-brown above, white with a pale tinge of flesh-colour beneath, with numerous longitudinal plaits for about half its length: *upper-jaw* thinner than the lower, with a single tooth each side: *noſe* long, depreſsed, nearly of the ſame thickneſs its whole length: *pectoral-fins* ſmall, narrow: *dorſal-fin* ſmall, near the tail: lobes of the *tail* rather long, pointed.

25. PHYSETER. *Cachalot.*

53. Ph. *macrocephalus*. Spiracle on the neck: back without fin.

Blunt-headed Cachalot. *Penn.* 3. *t.* 6. *Shaw t.* 228.

Body nearly 60 feet long, and 30 in girth, black, whitish underneath when advanced in age: *head* enormous, conſtituting a third part of the whole body, and ſeparated from it by a tranſverſe furrow: *upper-jaw* extremely blunt, nearly perpendicular, and about 9 feet high: *lower-jaw* thin and rather sharp, shorter than the upper, containing on each side 23 conic rather obtuſe teeth which fit into correſpondent ſockets in the upper: *tongue* the shape of the lower-jaw, clay-coloured: *ſpiracle* simple externally, double within, ſeated on an angular prominence: *back* ſometimes convex ſometimes with a gibboſity: *eyes* small, black, remote from the noſe, placed about half way down the head: *ears* very ſmall: *pectoral-fins* placed near the corners of the mouth, about 3 feet long: lobes of the *tail* pointed. In a vast cavity in the head is found the ſubſtance called *ſpermaceti*, and in the inteſtines *ambergris*.

54. Ph. *Catodon*. Spiracle at the extremity of the snout: back without fin.

Round-headed Cachalot. *Shaw* 2. *p.* 501. *Penn.* 3. *p.* 63.

Body about 24 feet long: *head* rounded: *mouth* ſmall: *back* without fin or portuberance, instead of which is a rough space: *teeth* larger and flat at top, marked with concentric circles.]

55. Ph. *Microps.* Upper-jaw longer than the lower: back with a long dorsal fin.

Small-eyed Cachalot. *Shaw Zool.* 2. *p.* 502.

Body from 70 to 100 feet long, blackish above, whitish beneath: *head* large, nearly half the length of the body: *eyes* very small: *teeth* thick sharp, curved or straight: *spiracle* in the middle of the front: *dorsal-fin* pointed like a spine.

56. Ph. *Tursio.* Teeth flat at the tips: back with a very long erect fin.

High-finned Cachalot. *Penn.* 3. *p.* 64. *Shaw* 2. *p.* 503.

Body growing to 100 feet long: *teeth* slightly bent, compreſsed at the sides: *spiracle* placed in front; *dorsal-fin* extremely long pointed, erect, resembling the mast of a ship.

57. Ph. *bidens.* With a single tooth each side in the lower jaw: back with a single fin.

Two-toothed Cachalot. *Sow. Brit. Miscel.* 1. *tab.* 1.

Body 16 feet long, 11 in circumference, black above, nearly white below, with white vermicular streaks in every direction: *snout* long, pointed, nearly of equal thickneſs its whole length: *lower-jaw* blunt, longer than the upper: *upper-jaw* pointed, let into the lower by impreſsions corresponding with the teeth: *mouth* 1 foot 6 inches long: *tongue* smooth, vascular, small: *eyes* small, 6 inches behind the mouth: *spiracle* lunate, the ends pointing forwards: *dorsal-fin* shorter than the pectoral.

26. DELPHINUS. *Dolphin.*

58. D. *Phocæna.* Body somewhat conic, with broad back: snout suddenly sloping, rather obtuse.

Porpeſse. *Shaw Zool.* 2. *tab.* 229. 230. 231.

Body 6 or 7 feet long, bluish-black above, white beneath: *head* sloping suddenly and rather obtuse: *eyes* very small: *spiracle* between the eyes, semilunar, with the ends pointing forwards: *teeth* small, rather sharp, about 46 in each jaw: *tongue* flat rounded, crenate on the edge: *pectoral-fins* placed near the belly: *dorſal-fin* straight, triangular, rather beyond the middle of the body.

59. D. *Delphis.* Body oblong, rather cylindrical: snout long, narrow, somewhat pointed.

Dolphin. *Shaw Zool.* 2. *t.* 229. *Jonst. pisc. t.* 43.

Body 8 to 10 feet long, rather convex on the back, black above, whitish beneath: *snout* long, nearly of the same thickneſs its whole length, pointed, with a broad transverse projection of the skin on its upper part: *mouth* very long: *teeth* conic, pointed, a little incurved, 21 in the upper-jaw, 19 in the lower, locking into each other: *pectoral-fins* placed very low; *dorsal-fin* a little falcate, acute, rather beyond the middle of the body: *ſpiracles* in middle of the head.

60. D. *Orca.* Body thick: snout spreading upwards: teeth obtuse.

Grampus. *Shaw Zool. tab.* 232.

Body 18--25 feet long, very thick, black on the back, with a large white spot on each shoulder, marbled on the sides with black and white, snow-white on the belly: *head* abrupt: *nose* flat, turned up at the end: *lower-jaw* much wider than the upper: *teeth* 30 in each jaw, the front ones slenderer and more obtuse: *spiracle* flat, of 2 cells, on the top of the neck: *pectoral-fins* very broad: *dorſal-fin* acute, 5 or 6 feet long.

61. D. *bidens.* With 2 teeth in the front of the upper-jaw.

Bottle-nose Whale. *Hunt. Philos. trans.* 77. *tab.* 19.

Body 21 feet long, resembling the Dolphin, but the *snout* is much shorter: *front* bulging out very much: *teeth* only 2, placed in front of the upper-jaw: *pectoral* and *dorsal-fins* very small, the latter placed near the tail.

CLASS II. AVES. *BIRDS.*

Animals clothed with feathers, and furnished with two wings and two legs.

A. LAND-BIRDS.

ORDER I. ACCIPITRES.

Bill more or less incurved, the upper-mandible either dilated towards the point, or armed with a tooth-like process each side: legs short, with 3 toes forwards and one backwards: toes warty underneath.

1. **Falco.** *Bill* hooked, covered with a naked cere at the base: *nostrils* placed in the cere: *tongue* cloven: *middle-toe* connected with the outermost as far as the first joint.

2. **Strix.** *Bill* hooked, without cere: *nostrils* oblong, covered with recumbent bristles: *tongue* cloven: *head*, *ears*, and *eyes* large: outmost *toe* capable of being turned backwards: exterior web of the outer *quill-feather* serrate.

3. **Lanius.** *Bill* straight, hooked at the end, with a tooth each side of the upper mandible near the tip, naked at the base: *tongue* jagged at the end: *outer-toe* connected to the middle-one as far as the first joint.

ORDER II. PICÆ.

Bill sharp-edged, convex above, without the tooth-like process on the upper mandible.

1. *With 2 toes before and one behind.*

4. **Corvus.** *Bill* mostly straight, strong, pointed: *nostrils* covered with recumbent bristles: *tongue* cloven at the end: *outer-toe* connected to the middle-one as far as the first joint.

5. **Coracias.** *Bill* straight, slightly incurved at the point: *tongue* cloven: *nostrils* narrow, destitute of bristles: *toes* all divided to their origin.

6. **Oriolus.** *Bill* conic, a little convex, very acute, straight; the upper mandible a little longer, and slightly emarginate: *tongue* cloven, acute: *nostrils* at the base of the bill, partly covered: *middle-toe* connected near the base to the outermost.

11. **Sitta.** *Bill* straight, strong, pointed, the upper mandible a little longer, compressed and angular at the tip: *nostrils* covered with recumbent bristles: *tongue* short, with a horny jagged point: *middle-toe* closely connected to the others at the base; the back toe as large as the middle-one.

13. **Upupa.** *Bill* long, slender, slightly compressed, a little bowed: *tongue* arrow-shaped: *nostrils* small, near the base of the bill: *middle-toe* connected to the outmost at the base.

14. **Certhia.** *Bill* slender, bowed, acute: *tongue* shorter than the bill, pointed: *tail* of 12 stiff pointed feathers: *hind-toe* very large: *claws* long, hooked.

10. **Alcedo.** *Bill* triangular, straight, strong, pointed: *nostrils* covered with feathers: *tongue* very short, flat, acute: *middle-toe* connected by the 3 lower-joints to the outermost.

12. **Merops.** *Bill* somewhat quadrangular, a little incurved, tapering to a point: *nostrils* small, at the base of the bill: *tongue* slender, jagged at the end: *middle-toe* connected as far as the middle joint to the outermost.

2. *With 2 toes before and 2 behind, all divided to their origin.*

7. **Cuculus.** *Bill* roundish, weak, a little bowed: *nostrils* bordered by a narrow rim: *tongue* arrow-shaped, short, pointed: *tail* of 10 long wedge-shaped feathers.

8. **Yunx.** *Bill* roundish, slightly curved, weak: *nostrils* concave, without feathers: *tongue* very long, slender, cylindrical, with a horny point: *tail* of 10 even soft rounded feathers.

9. **Picus.** *Bill* angular, straight, strong, wedge-shaped at the tip: *nostrils* covered with recumbent bristles: *tongue* very long, cylindrical, with a horny jagged point: *tail* of 10 stiff pointed feathers.

ORDER III. PASSERES.

Bill conic, pointed: nostrils oval, pervious: toes slender, 3 before and 1 behind: claws slender, curved.

1. *With a thick conic bill.*

18. **Loxia.** *Bill* strong, convex above and below, very thick and rounded at the base; the lower mandible bent in at the edge: *nostrils* small, round, at the base of the bill: *tongue* entire, truncate.

19. **Emberiza.** *Bill* strong, conic; the sides of each mandible bending inwards; the upper-one narrower, with a hard gibbosity in the roof: *tongue* pointed, covered with a hard scale at the end.

20. **Fringilla.** *Bill* perfectly conic, slender towards the end, pointed: *tongue* covered at the end with a hard scale.

2. *Upper mandible a little bent at the point.*

26. **Hirundo.** *Bill* short, small and a litte incurved at the point, broad and depressed at the base: *nostrils*

open: *tongue* short, broad, cloven: *gape* larger than the head: *wings* long: *tail* forked.

27. **Caprimulgus.** *Bill* short, a little incurved at the point, depressed at the base, with a row of stiff bristles at the base of the upper-mandible: *nostrils* tubular, a little prominent: *tongue* small, entire: *tail* entire, of 40 feathers: *toes* connected as far as the first joint; the claw of the middle-one broadish and serrate.

3. *Upper mandible slightly notched near the point.*

16. **Turdus.** *Bill* nearly straight, a little bending towards the point; *nostrils* oval, naked: *mouth* with a few slender hairs at the corners: *tongue* slightly jagged at the end: *middle-toe* connected to the outer as far as the first joint.

17. **Ampelis.** *Bill* straight, a little convex, bending towards the point: *nostrils* hid in reflected bristles: *tongue* sharp, cartilaginous, cloven: *middle-toe* connected to the outer at the base.

21. **Muscicapa.** *Bill* flattish at the base, nearly triangular, beset with bristles at the base: *tongue* cloven, rough on the sides: *toes* divided to their origin.

4. *Bill straight, taper, entire.*

15. **Sturnus.** *Bill* subulate, angular, depressed, rather obtuse; the edges of the upper-mandible a little spreading: *nostrils* surrounded with a rim: *tongue* cloven, acute: *middle-toe* connected to the outer as far as the first joint.

22. **Alauda.** *Bill* straight, slender, a little curved at the point: *nostrils* partly covered with feathers and bristles: *tongue* cloven, acute: *toes* divided to their origin; the hind-claw very long and more straight.

23. **Motacilla.** *Bill* straight, weak, slender, slightly notched at the end: *nostrils* covered with bristles: *tongue* lacerated at the point: *wings* short: *tail* very long.

24. **Sylvia.** *Bill* straight, weak, slender: *nostrils* obovate, a little depressed: *tongue* cloven: *middle-toe* connected underneath to the outer-one at the base.

25. **Parus.** *Bill* strong, pointed, a little compressed: *nostrils* round, covered with reflected bristles: *tongue* truncate, bristly at the end: *toes* divided to their origin, the back-toe large and strong.

ORDER IV. COLUMBÆ.

Bill nearly straight, tumid at the base: legs short: toes 3 *before and* 1 *behind, divided to their origin.*

28. **Columba.** *Bill* weak, slender, descending towards

the point: *nostrils* oblong, lodged in a soft protuberance: *tongue* entire.

ORDER V. GALLINÆ.

Bill convex; the upper-mandible arched over the lower: nostrils arched over with a cartilaginous membrane: toes rough underneath, divided to their origin.

29. **Phasianus.** *Bill* short, strong: *cheeks* more or less covered with caruncled flesh bare of feathers: *legs* generally armed with a spur.
30. **Tetrao.** *Bill* short, strong: *head* covered with a warty skin bare of feathers over the eyes: *nostrils* small, hid in the feathers: *tongue* pointed: *legs* feathered down to the toes.
31. **Perdix.** *Bill* short, strong: *head* without the naked skin over the eyes, but often warty: *nostrils* covered above with a prominent callous rim: *legs* bare of feathers below the knees, often armed with spurs: *tail* short.
32. **Otis.** *Bill* a little convex: *nostrils* ovate, open: *legs* bare of feathers above the knees: *toes* only 3, all placed forwards.

B. WATER-BIRDS.

ORDER VI. GRALLÆ.

Bill more or less cylindrical: legs long, naked above the knees: toes divided to their origin, or connected by a membrane at the base.

33. **Platalea.** *Bill* long, flattish, dilated and rounded at the tip: *nostrils* small, at the base of the bill: *tongue* short, acute: *feet* 4-toed, semipalmate.
34. **Ardea.** *Bill* long, straight, acute, a little compressed, with a groove from the nostrils towards the tip: *nostrils* linear: *tongue* acute: *feet* 4-toed, the toes connected at the base.
35. **Tantalus.** *Bill* long, subulate, nearly cylindrical, a little curved: *face* bald: *tongue* short: *jugular pouch* naked: *feet* 4-toed, palmate at the base.
36. **Numenius.** *Bill* long, curved: *face* covered with feathers: *nostrils* linear, near the base of the bill: *tongue* short, acute: *feet* 4-toed, the toes connected as far as the first joint.
37. **Scolopax.** *Bill* slender, straight, weak, obtuse, longer than the head: *nostrils* linear, lodged in a groove: *tongue* acute: *feet* 4-toed, the toes slightly connected or cloven to their origin; back-toe small.
38. **Tringa.** *Bill* straight, slender, as long as the head: *nostrils* small: *tongue* slender: *feet* 4-toed, divided to

their origin, or slightly connected; back-toe weak, and often raised from the ground.

39. Charadrius. *Bill* straight, slender, obtuse: *nostrils* linear: *feet* 3-toed, all placed forwards.

40. Cursorius. *Bill* roundish, acute, slightly curved at the point: *gape* very large: *nostrils* ovate: *tongue* acute: *legs* very long, with 3 toes all placed forwards.

41. Hæmatopus. *Bill* long, straight, compressed, wedge-shaped at the end: *nostrils* linear: *tongue* short; *toes* 3, all placed forwards, the middle-one connected to the outer as far as the first joint.

42. Rallus. *Bill* slender, compressed, slightly incurved: *nostrils* small: *tongue* rough at the end: *body* compressed: *wings* and *tail* short: *feet* 4-toed, cloven to their origin.

43. Gallinula. *Bill* thick at the base, sloping to the point; the upper-mandible reaching far up the forehead, where it becomes membranaceous: *body* compressed: *wings* and *tail* short: *feet* 4-toed, cloven to their origin.

ORDER VII. PINNATIPEDES,

Bill more or less cylindrical: legs long, naked above the knees: toes divided to their origin, with a membrane running down their whole length each side.

44. Phalaropus. *Bill* straight, slightly inflected at the point: *nostrils* minute: *feet* 4-toed; the toes furnished with pinnate or toothed membranes.

45. Fulica. *Bill* short, strong, sloping to the point, running far up the forehead which is bald: *nostrils* oblong, pervious: *body* compressed: *tail* short: *toes* 4, furnished with a scalloped membrane.

46. Podiceps. *Bill* straight, slender, pointed: *nostrils* linear: *tongue* slightly cloven: *lores* bare of feathers: *body* a little depressed: *tail* none: *legs* compressed; the shanks with a double row of serratures behind: *toes* 4, connected at the base, furnished with a simple membrane: *claws* flat, rounded.

ORDER VIII. PALMIPEDES.

Toes connected with each other by a web.

47. Recurvirostra. *Bill* long, slender, very weak, depressed, bowed upwards: *nostrils* oblong, pervious: *tongue* short: *toes* 4, with deeply lunate webs; the back-toe small, lax, raised above the ground.

48. Alca. *Bill* strong, thick, convex, compressed, often grooved: *nostrils* linear, placed near the edges

of the mandible: *tongue* nearly as long as the bill: *toes* 3, all placed forwards.

49. Uria. *Bill* strong, slender, pointed; the upper mandible slightly bending towards the point, covered with short feathers at the base: *nostrils* linear, in a hollow at the base of the bill: *tongue* nearly as long as the bill: *toes* 3, all placed forwards.

50. Colymbus. *Bill* strong, straight, pointed; upper-mandible longer, the edges of each turning inwards: *nostrils* linear: *tongue* long, pointed, toothed each side near the base: *legs* thin, flat: *toes* 4, the outer-one longer; back-toe small, connected by a small membrane to the inner-one: *tail* short, of 20 or more feathers.

51. Sterna. *Bill* straight, slender, pointed, a little compressed: *nostrils* linear: *tongue* slender, pointed: *wings* very long: *toes* 4, slender; the back-toe very small, and unconnected with the rest: *tail* mostly forked.

52. Larus. *Bill* strong, straight, bending down at the point, with an angular prominence on the under part of the lower mandible: *nostrils* linear, broader on the forepart, placed in the middle of the bill: *tongue* slightly cloven: *legs* naked above the knees; *toes* 4; the back-toe small, unconnected.

53. Procellaria. *Bill* a little compressed, hooked at the point: *nostrils* cylindrical, contained in a tube: *legs* naked a little above the knees: *toes* 3, placed forwards, with a spur pointing downwards instead of the back-toe.

54. Mergus. *Bill* slender, a little depressed, with a crooked nail at the point; the edges of the mandibles with sharp serratures: *nostrils* small, somewhat ovate, in the middle of the bill: *toes* 3 forward, the outer-one longer, and one behind, furnished with a web.

55. Anas. *Bill* broad, depressed, obtuse, with a nail at the point; the mandible edged with lamellate obtuse serratures: *nostrils* ovate: *tongue* broad, obtuse, fringed on the edges near the base: *toes* 3 forwards, the middle-one longer, and one behind unconnected.

56. Pelecanus. *Bill* long, straight, with a hooked nail at the point: *nostrils* concealed in a furrow: *face* and *gullet* bare of feathers: *toes* 4, all webbed together.

ORDER I. ACCIPITRES,

1. FALCO. *Falcon.*

A. *Legs feathered down to the toes.*

1. F. *fulvus.* Dark rusty-brown: bill blackish horn-colour: cere and toes yellow: tail with a white band.

Ring-tail Eagle. *Lewen. t.* 3. *Walcot.* 1. *t.* 4.

Length 2 feet 9 inches: *extent* of wings 7 feet. *Bill* and *claws* blackish: *irids* hazel: *head* and *neck* inclining to rufous: *front* between the eyes and nostrils naked: *breast* marked with triangular spots: *tail* white for two-thirds of its length, black at the ends.

2. F. *chrysaetos.* Dark brown with ferruginous variations: bill deep blue: cere and feet yellow: legs clothed with yellow-ferruginous feathers: tail blackish, with grey undulations at the base.

Golden Eagle. *Br. Zool. t.* 16. *Lewen t.* 2. *Walc. t.* 3.

Length 3 feet: *extent* 7 feet 4 inches: *weight* 12 pounds.

Eyes dark brown: *iris* hazel: *head* aud *neck* rich ferruginous-brown: *plumage* brown with tawny edges: *quill-feathers* chocolate-brown: *tail* blackish-brown, with cinereous undulations, white at the roots: *claws* black.

3. F. *Lagopus.* Variegated brown and whitish: head and neck yellowish-grey, with oblong brown marks: cere and feet yellow: tail-feathers brown, the upper half and tips white.

Rough-legged Falcon. *Br. Zool. app. t.* 1 *Lewen* t. 14.

Length 2 feet 2 inches.

Bill dusky, tipt with black: *iris* yellow: *breast* yellowiſh-grey with brown marks: *belly* dusky-brown: feathers of the *legs* pale dull yellow with brown ſpots: *tail-coverts* white with brown ſtreaks: *claws* blackish.

B. *Legs feathered to the knees or a little below.*

4. F. *Albicilla.* Head and neck pale ash-colour: body dark ash-colour clouded with brown: bill cere and legs yellow: tail-feathers white, the middle-ones tipt with black.

Cinereous Eagle. *Br. Zool.* 1. *t.* 18. *Lewen t.* 4. *Walcot t.* 1.

Length 2 feet 9 inches: *extent* of wings 7 feet: weight

In Cumberland and the Scotch Islands. *Bill* yellowiſh horn-colour, elongated at the baſe: *iris* pale yellow: between the eyes and nostrils a bluish ſpace, naked except a few bristles: *quill-feathers* very dark: *tail* dusky at the baſe, white except the tips of the middle feathers: *legs* feathered a little below the knees: *claws* black.

5. F. *ossifragus.* Ferruginous brown: bill bluish horn-colour: cere and legs yellow; tail-feathers white on the inner-webs.

Sea Eagle. *Br. Zool. t.* 17. *Lewen t.* 1. *Donovan t.* 105.

Length 3 feet 4 inches: *expansion* 8 or 9 feet. Maritime Woods. *Orbits* yellow: *iris* light hazel: *feathers* of the head and upper-part of the neck dull brown at the tips, tawny below the middle, and white at the base: *chin* with a few bristle-like hairs: *throat breast* and *belly* with a few white irregular patches: *tail-coverts* mottled with white: *legs* feathered below the knees. *Female* entirely dark-rusty-brown.

6. F. *Haliaetos.* Above brown, beneath white with a few brown spots: hind head and neck whitish: cere and legs blue.

Oſprey. *Lewin t.* 5. *Walcot* 1. *t.* 5. *Donovan t.* 70.

Length 25 inches: *extent* 5 feet 4 inches: *weight* 62 ounces. Mountainous lakes. *Bill* black: *iris* yellow: *head* small, flat, the feathers brown with white margins: the back-part *throat* and *neck* white mixed with brown: from the eye is a brown band reaching nearly to the shoulder: feathers of the *back* and *wings* dull-brown edged with white: *breast* and *belly* white with rusty-brown spots: *legs* feathered just below the knees: 2 middle *tail-feathers* dusky-brown, the rest alternately barred on their inner webs with brown and white: *claws* black.

7. F. *Milvus.* Ferruginous-brown: head and chin grey with brown lines: cere and legs yellow: tail deeply forked.

Kite. *Lewin. t.* 10. *Donovan t.* 47. *Walcot* 1. *t.* 10.

Length 27 inches: *extent* 5 feet and an inch: *weight* 44 ounces. Woods. *Bill* horn-colour: *iris* pale yellow: *neck* and *breaſt* ferruginous, the middle of the feathers black: *belly* ferruginous with fewer ſpots: *back* ferruginous, the feathers dark above in the middle with pale edges: outer *quill-feathers* dusky-black with obscure bars: *tail* bright ferruginous, the outer-feathers nearly black: *legs* feathered to the knees: *claws* black.

8. F. *Buteo.* Above brown: breast and belly dirty white with rusty-brown spots: cere and legs yellow: tail with dusky bars.

Buzzard. *Brit. Zool. t.* 25. *Lewin t.* 6. *Donovan t.* 11.

Length 22 inches: extent 52: *weight* 32 ounces. Woods. *Bill* lead-colour, tipt with black: *iris* white, tinged with red: *head* and upper part of the *breaſt* pale ferruginous; lower-breaſt with dirty-white blotches: *throat* and back of the head white with yellow-brown ſtreaks: *ſcapulars* and *wing-coverts* tipt with pale ferruginous and dirty white, the two laſt coverts with an edge of the ſame: *belly* white, with a few ferruginous ſpots: *thighs* deep ferruginous with deeper bars; inner-webs of the primary *quill-feathers* white towards the baſe: *tail* with blackish and cinereous bars, dull-white at the tip: *legs* feathered below the knees: *claws* black.

9. F. *apivorus.* Above deep brown, beneath white with red-brown transverse spots: head cinereous: cere dusky: legs dull yellow: tail with 2 dusky-brown bars.

Honey Buzzard. *Lewin t.* 7. *Albin* 1. *t.* 2.

Length 23 inches: *breadth* 4 feet 1: *weight* 30 ounces. Woods. *Bill* black; *iris* yellow; *chin* yellow-white with narrow brown longitudinal ſtreaks: *breaſt* and *belly* with tranſverſe ſpots of white and red-brown: *tail* ſometimes with a single cinereous band, and tipt with white: *legs* feathered below the knees: *claws* dusky.

10. F. *æruginosus.* Chocolate-brown: crown and throat yellowish or whitish: cere greenish yellow: legs long, yellow.

Moor Buzzard. *Brit. Zool. t.* 27. *Lewin t.* 8. *Walcot. t.* 8.

Length 21 inches: *extent* 4 feet 3: *weight* 20 ounces. Moors. *Bill* black: *iris* yellow: *body* chocolate-colour, with a ferruginous tinge: *crown* and *throat* varying to yellow whitish or ruſty-brown: *legs* long, slender, feathered to the knees: *claws* black.

11. F. *palumbarius.* Deep brown above, white with numerous transverse black lines underneath; cere yellowish green: legs yellow: over the eyes a white stripe: tail with 4 or 5 blackish bands.

Goshawk. *Brit. Zool. t.* 24. *Lewin t.* 9. *Walcot t.* 9.

Length 22 inches or more.

Woods. *Bill* blue tipt with black: *iris* yellow: *neck* with a broken patch of white at the sides: *wings* reaching very little beyond the baſe of the tail: *tail* long, cinereous, with 4 or 5 dusky bands: *legs* feathered a little below the knees: *claws* black.

12. F. *gentilis.* Brownish-grey, with longitudinal brown spots: cere and legs yellow: tail with 4 blackish bands, tipt with white.

Falcon gentil. *Br. Zool. t.* 21, 22. *Lewin t.* 11. *Walcot t.* 11.

Something larger than the laſt. *Bill* lead-colour: *iris* yellow: *head* pale ferruginous, with oblong darker ſpots: *back* brown: *quill-feathers* dusky, with dark bars on the outer webs, and white ones on the lower parts of the inner webs: *wing-coverts* and *ſcapulars* brown with a ferruginous edge: all the parts underneath yellowish-white, with oblong dusky ſpots, which in the young bird are tranſverſe: *tail* with alternate black and grey bands, tipt with white: *legs* feathered a little below the knees: *claws* black.

13. F. *islandicus.* Whitish with brown spots: cere and legs blue.

Jerfalcon. *Br. Zool. t.* 19. *Lewin t.* 16. *Walcot t.* 15.

Length 2 feet; *extent* 4 feet: *weight* about 3 pounds: North of Scotland. *Bill* bluish tipt with black, (yellow *Penn.*) *iris* blue: whole *plumage* white, with dusky ſpots lines or bars: *legs* feathered below the knees: *claws* blackish.

14. F. *peregrinus.* Above bluish, beneath whitish with transverse blackish streaks: cere and legs yellow: crown black: tail with brown bars, tipt with white.

Peregrine Falcon. *Br. Zool. t* 20. *Lewin t.* 12. *Donov. t.* 53.

Size of the Moor Buzzard: *weight* between 2 and 3 pounds. *Bill* short strong, bluish tipt with black: *iris* dusky: *crown* round the fore-part and under the *eyes* black: *quill-feathers* dusky with white tranſverſe ſpots, inner-coverts with black and white bars: *neck* and *breast* with a few dusky lines pointing downwards: *tail* with ſeveral alternate blue and blackish bars: *legs* feathered to the knees: *claws* black.

15. F. *versicolor.* Variegated above with white and reddish brown: rump whitish underneath: neck and breast with ferruginous spots: quill and tail-feathers brown, with deeper bands: cere and legs yellow.

Spotted Falcon. *Br. Zool. t.* 26. *Lewin t.* 13. *Walcot. t.* 13.

Size of the Buzzard. *Bill* blackish: *iris* yellow: *crown* and *nape* whitish, with pale reddish-brown ſpots: *back* and *wings* reddish-brown, the feathers edged with white: *belly* white: middle *tail-feathers* with white and deep brown bands, the rest with light and darker brown: *legs* feathered below the knees: *claws* black:

16. F. *cineraceus.* Head and upper-parts dark brownish-grey; underneath white, with ferruginous streaks: cere and legs yellow: outer quill-feathers black; tail with ferruginous bars.

Ash-coloured Falcon. *Montague Ornith. Dict.* 1.

Shot in *Wiltshire.* About the size of the Sparrow Hawk. *Bill* black: *iris* yellow: *feathers* on the upper-parts darker at the tips; of thoſe underneath with large ferruginous streaks down the middle: *wings*, when cloſed, longer than the tail: greater *wing-coverts* dusky-black on the outer webs towards the middle, forming a ſmall bar on the wings: 2 middle feathers of the *tail* brownish-grey, 3 next on each side light grey, outer-ones nearly white, all except the outer-ones barred with ferruginous: *legs* long, slender: *claws* short, black.

17. F. *griseus.* Above grey, white underneath with oblong black spots: cere eyelids and legs yellow: head dark brown, white behind: tail long, wedge-form: quill and lateral tail-feathers spotted with white.

Grey Falcon. *Br. Zool. n.* 49. *Lewin t.* 17.

Shot near Halifax, 1762. Size of a Raven.

Bill bluish: *iris* reddish: *head* ſmall, flat; the sides and *throat* cream-colour: *wings* when cloſed, longer than the tail; the primary feathers black tipt with white, the rest bluish-grey with irregular white ſpots on their inner webs: *tail-feathers*, except the two middle-ones, ſpotted: *legs* long, feathered to the knees: *claws* blackish.

18. F. *Lanarius.* Above brown with paler edges; beneath yellow-white with brown longitudinal spots: cere greenish blue: legs blue: over the eyes a white stripe.

Lanner. *Br. Zool. t.* 23. *Lewin t.* 15. *Walcot t.* 16.

Leſs than the Buzzard. *Bill* blue: *iris* yellow: *crown* brown, with a yellowish-white mixture; beneath the *eyes* a black mark pointing downwards: *chin* and *throat* white: *quill* and *tail-feathers* dusky, with oval ferruginous ſpots on the inner-webs: *legs* feathered below the knees: *claws* black.

19. F. *cyaneus.* Blue-grey, paler underneath: cere and legs yellow: 6 first quill-feathers black, white at the base, slightly tipt with grey.

Hen Harrier. *Br. Zool. t.* 28. *Lewin t.* 18. *Donovan t.* 59.

Length 17 inches: *extent* 3 feet 3 inches: *weight* 12 ounces. *Bill* blackish: *iris* yellow; *hind-head* often ſpotted with pale brown: under the *eye* an arch of whitish feathers: *vent*white: *tail-feathers* white, grey on the outer-webs, the 2 middle-ones with dusky marks: *legs* feathered to the knees: *claws* black.

20. F. *Pygargus.* Above dull-brown, beneath paler with oblong rufous spots: cere and legs yellow: under the eyes a white arch surrounding the chin: tail with dusky bands, tipt with white.

Ring-tail. *Lewin t.* 18. *Walcot* 1. *t.* 18. *Hayes t.* 2.

Length 20 inches: *extent* 3 feet: *weight* 20 ounces. *Bill* dusky: *iris* yellow: *orbits* whitish: under the eyes a whitish ſpot: feathers of the *head, neck*, and *wing-coverts* with rufous margins: *rump* whtie: *legs* long: *claws* black.

This has been ſuppoſed to be the female of the last.

21. F. *Tinnunculus.* Rufous, with black spots on the back and streaks underneath: cere and legs yellow: tail rounded, with a broad blackish bar near the end.

Kestril. *Lewin t.* 19. 19*. *Donovan t.* 51. 63.

Length 14 inches: *extent* 2 feet: *weight* half a pound.

Male. *Bill* bluish tipt with black: *iris* dusky: *head* and *neck* grey; under the *eye* a dusky streak pointing downwards: primary *quill-feathers* black with whitish tips: *vent* pale, ſpotleſs: *tail* grey, with a whitish tip: *claws* black.

Female larger. *Head* and *neck* nearly the colour of the back: under-parts paler with dusky streaks: *tail* with ſeveral dusky bars: legs with a tinge of green.

22. F. *Nisus.* Above rich brown, beneath orange-white, with brown undulations: cere greenish-yellow: legs yellow: on the back of the head an obscure white patch: tail with broad dusky bars.

Sparrow-hawk. *Lewin t.* 20. *Hayes t.* 3. *Walcot t.* 20.

M. *Length* 12 inches: *extent* 2 feet; *weight* 6 ounces.

F. *Length* 15 inches: *extent* 2 feet 4 inches: *weight* 9 ounces.

Bill blue: *iris* yellow: *upper-parts* sometimes inclining to bluish-grey: *quill-feathers* dusky with black bars on the outer-webs, the inner-webs ſpotted with white below: *breast* of the male ferruginous, of the female whitish: *tail* whitish at the end: *legs* feathered to the knees: *claws* black. The whole bird is ſometimes pure white.

23. F. *Subbuteo.* Above bluish-black, beneath pale, with oblong brown spots: throat and nape white: eyes with a white line above them, and a black patch beneath: cere and legs yellow.

Hobby. *Lewin t.* 21. *Donovan t.* 91. *Walcot t.* 21.

Length 12 inches: *extent* 2 feet 3 inches: *weight* 7 ounces.

Bill blue: *iris* brown: *head* and *back* deep bluish-black dashed with grey: *chin* and *throat* white, extending round the neck where it becomes darker: *orbits* yellow; *wings* reaching nearly to the end of the tail when cloſed: *quill-feathers* dusky-black, with oval ferruginous ſpots on the inner-webs: *vent* and *thighs* reddish-white: lateral *tail-feathers* with rusty bars on the inner-webs, whitish at the tips; *legs* feathered to the knees: *claws* black.

24. F. *Æsalon.* Head ferruginous, with bluish black lines: body above bluish-grey with ferruginous streaks and spots, beneath yellowish-white, with oblong brown spots: cere and legs yellow.

Merlin. *Lewin t.* 22. *Donovan t.* 94. *Walcot t.* 22.

Length 12 inches: *extent* 25 inches: *weight* 5 ounces and a half.

Bill lead-colour: *iris* brown: *nape* paler: *quill-feathers* blackish, with reddish oval ſpots: under *wing-coverts* brown, with round white ſpots: *throat* nearly white: *tail* with alternate dusky and reddish bands, whitish at the tip: *legs* feathered to the knees: *claws* black.

2. STRIX. *Owl.*

25. St. *Bubo.* Head crested with ear-like feathers: body rufous, with black, brown and grey lines and spots.

Great-eared Owl. *Br. Zool. t.* 29. *Lewin t.* 23. *Walcot t.* 23.

Size nearly equal to an Eagle. *Bill* bluish: *iris* yellow: *plumage* entirely a mixture of ferruginous black, brown, and grey, paler underneath: *wings* long: *tail* short, with dusky bands: *legs* thickly clothed with testaceous down quite to the claws: *claws* much hooked, dusky.

26. St. *Otus.* Head with ear-like crests, consisting of 6 feathers each: body orange, with blackish streaks: quill-feathers with black and grey bands.

Long-eared Owl. *Br. Zool. t.* 30. *Lewin t.* 24. *Walcot t.* 24.

Length 15 inches: *extent* 3 feet: *weight* 10 ounces.

Bill blackish: *iris* orange: feathers of the *crest* gradually lengthening, black with a dull yellow border: *face* ſurrounded with a white circle, speckled with black and rufous: *cheeks* pale rufous: over the *eyes* and round the angle next the bill black: primary *quill-feathers* with two dull yellow bars: *thighs* and *vent* unſpotted; *tail* with grey and dusky bar and ſpecks: *legs* clothed with pale yellow down quite to the claws: *claws* dusky.

27. St. *Brachyotus.* Head with short ear-like crests: body dull orange, beneath yellow, with brown longitudinal spots: middle tail-feathers with a yellow spot inclosing a brown one.

Short-eared Owl. *Br. Zool. t.* 31. *Lewin t.* 25. *Donovan t.* 35.

Length 14 inches: *extent* 3 feet: *weight* 14 ounces.

Bill dusky: *iris* yellow: *orbits* black: *face* ſurrounded with a line which is black and white, except at the ears where it is black: *crest*, which it can erect at pleaſure, compoſed of ſeveral feather, black on the outer webs, white on the inner: feathers of the *head*, *back*, and *wing-coverts* brown with a tawny margin: *breast* and *belly* paler, with longitudinal brown lines. *thighs* not ſpotted: *legs* clothed to the toes with light yellow down: *claws* dusky.

28. St. *stridula.* Head without crest: brown-orange above with dark-brown marks, beneath paler with oblong dark spots: third quill-feather longest.

Tawny Owl. *Lewin t.* 7. *Donovan t.* 121. *Walcot. t.* 27.

2. Body darker: iris black.

Brown Owl. *Br. Zool. t.* 32. *Lewin t.* 28.

Length 14 inches: *extent* 2 feet 8 inches: *weight* 20 ounces.

Bill pale brown: *iris* dusky: *face* encircled by a black and white line: outer-webs of the outer-*scapulars* white: ſecondary *quill feathers* with a white ſpot on the outer-webs: two middle *tail-feathers* tawny, the rest with tawny and dark lines and ſpots: *legs* clothed to the toes with greyish down: *claws* black.

29. St. *Ulula.* Head without crest: body above reddish with longitudinal brown spots, underneath whitish with brown lines: tail with brown bars.

Brown Owl. *Lath. syn.* 1. *p.* 140. *Buffon* 1. *t.* 27.

Length 15 inches and a half: *weight* 14 ounces.

Iris yellow: general *colour* browner than the last; and the ſpots larger and longer, tending to a point like the flame of a candle, which in the former are more rounded like drops.

30. St. *flammea.* Head without crest: body above pale yellow with white and grey spots, underneath white with blackish spots.

Screech Owl. *Lewin t.* 26. *Donovan t.* 113. *Walcot. t.* 26.

Length 14 inches: *extent* 3 feet: *weight* 12 ounces.

Bill light brown: *iris* dusky: *orbits* orange: *cheeks* white: *face* ſurrounded with a white circle: primary *quill-feathers* yellow on the outer webs, white on the inner, with 4 black ſpots each side: inner-webs of the *tail-feathers* white, outer-webs with dusky bands: *legs* clothed with white down to the claws: *claws* light brown, the middle one serrate.

31. St. *passerina.* Head without crest: above olive-brown, beneath whitish spotted with brown: head spotted with white: quill-feathers with 5 rows of white spots.

Little Owl. *Lewin t.* 28. *Walcot. t.* 28. *Albin* 2. *t.* 12.

Length 8 inches: *extent* 21 inches. Size of a Blackbird.

Bill yellowish: *iris* yellow: feathers encircling the *face* white tipt with black: *breast* mixed ferruginous and white: *tail* brown with dull rufous bands: *legs* clothed to the claws with whitish down: *claws* pale brown.

3. LANIUS. *Shrike.*

32. L. *Excubitor.* Tail wedge-form, blackish with the sides white: head and back pale cinereous; wings blackish with a white band.

Butcher-bird. *Br. Zool. t.* 33. *Lewin t.* 29. *Donovan t.* 87.

Bill blackish : *iris* dusky : *mouth* beſet with strong bristles : from the baſe of the bill acroſs the eyes a blackish stripe : *head. neck*, and *back* hoary-grey : *ſcapulars* white · *wings* hardly as long as the rump, the coverts black : *quill-feathers* black, with a broad white band, ſome of them tipt with white : *throat breast* and *belly* dirty-white : 2 middle *tail-feathers* black, the others becoming whiter, the outer-ones white : *legs* black. *Female* with tranſverſe ſemicircular brown lines on the breast and belly.

33. L. *Collurio.* Tail wedge-form, white at the edges : head and neck pale cinereous : back and wing-coverts bright ferruginous.

Red-backed Shrike. *Lewin t.* 30. *Albin* 2. *t.* 14. *Walcot t.* 30.

Length 7 inches and a half :*extent* 11 inches : *weight* 2 ounces.

Bill lead-colour : *iris* hazel : from the bill through the *eyes* a blackish stripe : *ſcapulars* bright ferruginous : *quill-feathers* brown, with a lighter edge on the outer-webs : *rump* pale grey : from the *chin* downwards pale bloſsom colour : *vent* white : middle *tail-feathers* black, the rest white on the outer edge, the 2 outermost nearly all white : *legs* dark brown. *Female* with tranſverſe ſemicircular brown lines : upper-part of the *head* and *neck* ferruginous : *tail* ferruginous, dusky near the end.

34. L. *rutilus.* Tail wedge-form : head, neck and back ferruginous : shoulders white : quill-feathers black, with a whitish spot near the tip.

Wood-chat. *Lewin t.* 31. *Donovan t.* 84. *Waleot t.* 31.

About the size of the last. *Bill* horn-colour, with whitiſh feathers at the baſe : *iris* hazel : from the base of the bill through the *eyes* a blackish stripe : upper-part of the back dusky : *wing-coverts* dusky : from the *chin* downwards yellowish-white : *tail-feathers* blackish, the margins and tips whitish, except the 2 middle-ones : *legs* dusky. *Female, head* and *neck* reddish with brown tranſverſe lines, beneath dirty-white with brown curved tranſverſe lines : *tail* reddish-brown, with a dark band near the end, and tipt with red.

ORDER II. PICÆ.

4. CORVUS. *Crow.*

35. C. *Corax.* Deep black ; the upper-parts with a bluish gloss : tail a little rounded.

Raven. *Lewin t.* 32. *Albin* 2. *t.* 20. *Walcot t.* 32.

Length nearly 2 feet : *extent* 4 feet : *weight* 3 pounds.

Bill blackish, strong, thick, nearly 3 inches long : *nostrils* covered with bristles reaching half way down the bill : *iris* dusky : under-parts dusky, without gloſs : *legs* black. Sometimes found pied, or entirely white.

36. C. *Corone.* Deep black, with a bluish gloss all over : tail rounded, with the feathers pointed.

Carrion Crow. *Br. Zool. t.* 34. *Lewin t.* 33. *Walcot t.* 33.

Length 18 inches : *extent* 26 inches : *weight* 20 ounces.

Bill black, a little convex near the tip : *nostrils* covered with bristles : *iris* dusky : *plumage* black, with a violet-blue gloſs, leſs shining underneath : *legs* black.

37. C. *frugilegus.* Deep black, with a bluish gloss above : front bare of feathers and grey : tail a little rounded.

Rook. *Lewin t.* 34. *Albin* 2. *t.* 22. *Walcot t.* 34.

Rather larger than the last. *Bill* black, gradually tapering : *iris* dusky : *nostrils* without bristles : above the baſe of the bill, between that and the eyes, and thence to the chin, whitish ſcurfy and bare of feathers in the old birds: *legs* black: inner-edge of the *middle-claw* ſerrate.

38. C. *Cornix*. Light ash-colour: head, throat, wings, and tail glossy bluish-black.

Hooded crow, *Lewin n.* 35. *Donovan t.* 117. *Walcot t.* 35.

Length 22 inches: *extent* nearly 3 feet: *weight* 22 ounces.

Bill a little convex: *head*, under-side of the *neck*, point of the *breast*, *wings tail* and *legs*, gloſsy violet-black, the other parts pale cinereous. *Female* with the throat bluish-grey.

39. C. *Monedula*. Pale bluish-black: hind-head and back of the neck grey: front, wings, and tail black.

Jackdaw. *Lewin t.* 36. *Albin* 1. *t.* 14. *Walcot t.* 36.

Length 13 inches: *extent* 28 inches: *weight* 9 ounces.

Bill a little curved at the point: *iris* light-grey: *tail* slightly rounded: *legs* blackish. Is ſometimes found without the grey on the head and neck, ſometimes mixed black and white, or entirely white.

40. C. *glandarius*. Vinaceous buff-colour: head white with black strokes: wing-coverts with blue and black bars: tail black.

Jay. *Lewin t.* 38. *Donovan t.* 2. 34. *Walcot t.* 37.

Length 13 inches: *extent* 21 inches: *weight* 7 ounces.

Bill dusky: *iris* whitish: under the *eyes* a broad black streak from the angles of the mouth: *chin* whitish: *crown* with long feathers, capable of being erected into a crest: greater *wing-coverts* blue with tranſverſe black and white lines; lesser-ones bay, the rest black: greater *quill-feathers* dusky, grey on the outer-webs, except the first; 6 ſecondary-ones black, the outer-webs white near the baſe, and tinged with blue; 2 next black; thoſe next the body are tipt with black: *rump* and *tail-coverts* white: *legs* pale brown: *claws* dusky.

41. C. *Pica*. Black, with a blue green and purple gloss: scapulars, breast, and upper part of the belly white: tail long, wedge-form.

Magpie. *Lewin t.* 40. *Donovan t.* 95. *Walcot t.* 39.

Length 18 inches: *extent* 22 inches: *weight* about 9 ounces.

Bill dusky: *eyes* dark-brown: *vent* black: 10 first *quill-feathers* white on the middle of the inner-webs: *tail* 9 inches and a half long, and like the wings with a rich variable gloſs of blue, green, and purple: *legs* and *claws* black.

42. C. *caryocatactes*. Rusty-brown, with triangular white spots: crown and wings blackish: tail blackish, tipt with white, the middle feathers as if worn.

Nutcracker. *Br. Zool. app. t.* 3. *Lewin t.* 37. *Donovan t.* 80.

Length 4 inches: *extent* 21 inches: *weight*

Bill dusky: *iris* hazel: upper-part of the *head* and *nape* blackish: *vent* white: *tail* rounded: *legs* dusky: *claws* black.

43. C. *Graculus*. Black, with a violet gloss: bill and legs orange-red.

Red-legged Crow. Chough. *Br. Zool. t.* 35. *Lewin t*, 39. *Walc. t.* 40.

Length 16 inches: *extent* 33 inches: *weight* 13 ounces

Bill nearly 2 inches long, curved, slender, sharp-pointed: *iris* hazel: *bristles* at the baſe of the bill not covering the noſtrils: *legs* long, slender: *claws* black.

5. CORACIAS. *Roller*.

44. C. *garrula*. Head, neck, breast and belly pale bluish-green: back and scapulars red-brown: coverts on

the ridge of the wing, lower-part of the quills and rump rich blue: upper-part and tips of the quills dusky.

Roller. *Br. Zool. app. t.* 2. *Lewin t.* 41. *Donov. t.* 33.

Length 12 inches and a half: size of the jay.

Bill dusky, with briſtles at the baſe, not covering the noſtrils: *iris* light hazel: *orbits* rather bare of feathers: *coverts* on the ridge of the wing rich blue, beneath them pale green: *tail* forked, light blue, the outer-feathers ſtriped with black above, beneath with deep blue; the reſt dull green: *legs* dirty-yellow: *claws* blackish.

6. ORIOLUS. *Oriole.*

45. O. *Galbula* Golden yellow: lores black: wings black with a yellow patch in the middle: tail black, the outer-feathers yellow on the lower half.

Golden Oriole. *Br. Zool. app. t.* 4. *Lewin. t.* 42. *Donovan. t.* 7.

Length 9 inches and a half: ſize of the black-bird.

Bill brownish-red: *iris* red: *wings* with yellow marks near the back: 2 middle *tail-feathers* black, inclining to olive at the baſe, tipt with yellow: *legs* lead-colour: *claws* black.

Female dull green-brown where the male is yellow: *wings* dusky: *tail* dirty-green, whitish at the ends, except the 2 middle-feathers.

7. CUCULUS. *Cuckow.*

46. C. *canorus.* Brownish-grey: neck and breast whitish with transverse undulate blackish streaks: tail rounded, blackish; the outer feathers spotted with white.

Common Cuckow. *Br. Zool. t.* 36. *Lewin t.* 44. *Donovan t.* 41.

Length 14 inches: *extent* 25 inches: *weight* 5 ounces.

Bill yellow with a dusky tip: *iris* yellow: margins of the *eyelids, gape, and palate* ſaffron-red: *wings* reaching nearly to the end of the tail; the feathers dusky, with oval white ſpots on the inner-webs: *tail* of 10 very unequal feathers, the 2 middle-ones blackish, all tipt with white: *legs* very short, yellow: *claws* dusky.

Female with the *neck* and *breast* tawny-brown, with dusky bars: *wing-coverts* with pale rusty ſpots. *Young bird* brown, the feathers edged with white.

8. YUNX. *Wryneck.*

47. *Torquilla.* YUNX.

Wryneck. *Lewin t.* 51. *Donovan t.* 83. *Walcot t.* 44.

Length 7 inches: *extent* 11 inches: *weight* 10 drachms.

Bill pale lead colour: *tongue* 2 inches and a quarter long, miſsile, cylindrical: *iris* light hazel: top of the *head* and back divided by a list of black and ferruginous strokes: upper part of the *head* and *neck, back, rump*; and upper *tail-coverts* cinereous, with dusky tranſverſe undulate lines: *chin* and forepart of the *neck* yellowish-white, with tranſverſe dusky lines: lower-part of the *breast belly*, and *sides* whitish, with triangular dusky ſpots: *wing-coverts* dull rufous, with grey ſpots: greater *quills* dusky, with quadrangular ferruginous ſpots on the outer-webs: *tail* rounded, cinereous, with 4 dusky bars: *legs* brown: *claws* dusky.

9. PICUS. *Woodpecker.*

48. P. *martius.* Black, the crown of the head rich scarlet.

Great black Wood-pecker. *Lewin t.* 45. *Donovan t.* 13. *Walcot t.* 45.

Length 17 inches and a half: size of a jackdaw.

Bill dark-grey, whitish on the sides: *iris* pale yellow: *tail-feathers* pointed, the 2 middle-ones longer: *legs* lead colour, covered on the fore-part with feathers half their length: *claws* black.

Female rusty-brown, the hind part of the *head* only ſcarlet.

49. **P. *major*.** Variegated with black and white: vent bright crimson: male with a bar of crimson across the nape.

Great ſpotted Wood-pecker. *Lewin t.* 48. *Walcot t.* 48.

Length 9 inches: *extent* 16 inches: *weight* 2 ounces and 3 quarters. *Bill* dusky: *iris* red-brown: *front* dirty-white: *crown* gloſsy-black: *cheeks* white, with a black line beneath from the corner of the mouth to the back of the head, and another running down each side from the middle of it and nearly meeting on the breast: *neck* with a black ſpot each side: *throat* and *breast* yellowish-white: *belly* white: *vent* and hind-part of the *thighs* fine crimſon: *back*, *rump*, and *tail-coverts* and leſser *wing-coverts* black: scapulars and coverts next them white: *quills* black, with white round ſpots on each web: 4 middle *tail-feathers* black, the rest white towards the points with black ſpots: *legs* lead-colour: *claws* black.

Female without the crimſon bar on the nape.

50. **P. *medius*.** Variegated with black and white: crown and vent bright crimson.

Middle-ſpotted Woodpecker. *Br. Zool. t.* 37. *Lewin t.* 49.

Length 8 inches and a half: leſs than the laſt.

Differs from the former, of which it is probably the young bird, in having the whole *crown* red, and the white about the *eyes* and *neck* larger, and the *bredſt* inclining to brown.

51. **P. *minor*.** Variegated with black and white: crown in the male crimson, in the female white: vent dirty white.

Leſser ſpotted Woodpecker. *Br. Zool. t.* 37. *Lewin t.* 50.

Length nearly 6 inches: *extent* 11: *weight* not an ounce.

Bill lead-colour: *iris* red: *front*, *throat*, *breaſt* and *belly* dirty-white: *lores* white, bounded each side by a black line running down to the shoulders, which are black: *back* and *wings* with black and white bars: 4 middle *tail-feathers* black, the reſt more or leſs white ſpotted with black: *legs* lead-colour; *claws* black.

52. **P. *villosus*.** Variegated with white and black; white underneath: down the middle of the back a stripe of white hair-like feathers: 2 outer tail-feathers white: male with a red band across the hind-head.

Hairy Woodpecker. *Lewin t.* 47. *Walcot. t.* 47.

Length 8 inches and 3-quarters: *weight* 2 ounces.

Bill lead-colour: *iris* dull red: *head* black, with 2 white lines each side from the mouth, one over the eye, the other under it: upper parts of the *body* black; the back divided by a liſt of looſe-webbed hair-like white feathers: *wings* ſpotted with white: 4 middle *tail-feathers* black, the next obliquely white at the tips, the laſt but one white with a black baſe, the outer-ones wholly white: *legs* lead-colour: *claws* black.

Female without the red band acroſs the head.

53. **P. *Viridis*.** Green: head grey, with scarlet spots: tail with dusky bars.

Green Woodpecker. *Lewin t.* 46. *Donovan t.* 37. *Walcot. t.* 46.

Length 13 inches: *extent* 20 and-a-half: *weight* 6 ounces and a half. *Bill*, *legs* and *claws* horn-colour: *iris* whitish: *orbits* black, beneath which in the male is a ſcarlet ſpot bordered with black: *body* beneath pale green: *rump* yellow green: *quill-feathers* dusky, with round white ſpots on each web, the corner-ones green on the outer webs: edges of the wings variegated black and white: *tail* with green and dusky bars, the tip dusky.

Female without the ſcarlet on the chin.

10. ALCEDO. *Kingsfisher.*

54. A. *ispida.* Crown and wing-coverts blackish green, with bright azure lines: lores red-orange: chin and spot each side the neck white: back and rump bright azure: breast and belly dull rufous.

Kingsfisher. *Brit. Zool. t.* 38. *Lewin t.* 53. *Donovan t.* 100.

Length 7 inches: *extent* 11 inches: *weight* an ounce and a quarter. *Bill* 2 inches long, black, tinged with orange at the baſe of the lower mandible: *iris* hazel: acroſs the *eyes* a reddish band, under which is a dark-blue ſtripe: *throat* buff-colour: *ſcapulars* and upper *tail-coverts* bright azure: *tail* short, deep blue: *legs* red-orange: *claws* blackish.

11. SITTA. *Nuthatch.*

55. S. *Europæa.* Bluish-grey, beneath pale rufous: lore black; 4 lateral tail-feathers black, white toward the tip.

Nuthatch. *Br. Zool. t.* 38. *Lewin t.* 52. *Donovan t.* 81.

Length nearly 6 inches: *breadth* 9 inches: *weight* 6 drachms. *Bill* black, whitish at the baſe of the lower mandible: *iris* hazel: from the upper mandible acroſs the *eyes* a black ſtripe turning abruptly down the neck: *chin* and *cheeks* whitish: *quills* dusky: *vent* varied white and ferruginous: *tail* short, 2 middle-feathers bluish-grey, the reſt black, more or leſs marked with grey and white: *legs* yellowish-grey: *claws* large, dusky.

12. MEROPS. *Bee-eater.*

56. M. *apiaster.* Head and back chesnut: lores black: throat yellow: breast and belly green-blue: 2 middle tail-feathers of the male longer.

Bee-eater. *Lewin t.* 43. *Sowerby Miſc. t.* 69.

Length 10 inches. *Bill* blackish: *iris* dull red: *front* blue green, behind it green: *throat* divided from the breaſt by a curved black line: sides of the *back* golden-yellow, with a cheſnut tinge: *shoulders* orange shaded with green: ſmaller *wing-coverts* green, ſome of the greater edged with blue, the reſt cheſnut tipt with black: *quills* rich blue: *rump* blue: *tail* ſea-green, the 2 middle-feathers in the male nearly an inch longer than the reſt: *legs* short, pale-red: *claws* blackish.

13. UPUPA. *Hoopoe.*

57. U. *Epops.* Variegated with black, white, and pale rufous: head with a pale rufous crest, tipt with black: tail black, with a white band.

Hoopoe. *Br. Zool. t.* 39. *Lewin t.* 54. *Donovan t.* 9.

Length 12 inches: *extent* 19 inches: *weight* 3 ounces. *Bill* 2 inches and a half long, blackish: *iris* dark hazel: *creſt* of a double row of dull orange feathers tipt with black: sides of the *head, neck* and *breaſt* pale rufous, in the young bird the breaſt and belly ſpotted with black: upper part of the *back* brown: *quill-feathers* black, with white bands: *rump,* lower-part of the *belly* and *vent* white: *tail* of 10 feathers, the outer-ones white on the outer edges, except the tip: *legs* short, black.

14. CERTHIA. *Creeper*

58. C. *familiaris.* Tawny-grey, beneath white: head with black and yellow-brown streaks: wings brownish, 10 of the feathers with a white spot.

Creeper. *Brit. Zool. t.* 39. *Lewin t.* 55. *Walcot t.* 54.

Length 5 inches: *extent* 7 and a half: *weight* 5 drachms.
Bill brown: *iris* hazel: above the *eyes* a ſtroke of white: *quills* dusky, tipt with white, variegated with black: *shoulders* and leſser *coverts* tawny ſpotted with white: *rump* tawny: *tail* tawny, of 12 ſtiff pointed feathers: *legs* brown.

ORDER III. PASSERES.

15. STURNUS. *Stare.*

59. St. *vulgaris*. Bill yellow: body glossy-black, with yellowish-white spots.

Starling. *Br. Zool. t.* 46. *Lewin t.* 56. *Walcot t.* 195.
Length 8 inches 3 quarters: *extent* 14 inches: *weight* 3 ounces.
Bill in the young bird bluish at the baſe: *iris* hazel: *head, neck,* and upper parts of the *back* black, with a purple and green gloſs: lower part of the *back, breaſt, wing-coverts* and *rump* black, with a dark-green shade: *quill-feathers* and *tail* dusky, the former edged with yellow on the outer-web, the latter with dirty white: *legs* reddish-brown. *Young bird* dusky brown.

16. TURDUS. *Thrush.*

60. T. *viscivorus*. Above brown, beneath yellowish-white with dusky spots: 3 outer tail-feathers tipt with white.

Miſsel Thrush. *Lewin t.* 61. *Albin* 1. *t.* 33. *Walcot t.* 197.
Length 11 inches: *extent* 16 and a half: *weight* near 5 ounces.
Bill dusky, the baſe of the lower-mandible yellowish: *iris* hazel: *head, back,* and lesser wing-coverts olive brown; lower part of the back with a yellow tinge: sides of the *head* and *throat* whitish, with blackish ſpots: larger *wing-coverts* tipt with white: *quills* brown, with a mixture of grey on the outer-webs: *legs* pale yellowish-brown: *claws* dusky.

61. T. *musicus*. Above brown, beneath yellowish-white, with blackish arrow-shaped spots: quill-feathers ferruginous on the inner base.

Throſtle, Song Thrush *Lewin t.* 62. *Walcot t.* 198.
Length 9 inches: *extent* 13 and a half: *weight* 3 ounces.
Differs from the laſt in having the upper-parts more uniformly brown, the ſpots underneath arrow-shaped and pointing upwards, and the inner-wing-coverts yellow.

62. T. *Ericetorum*. Above brown, beneath yellowish-white, with blackish arrow-shaped spots: across the eyes a blackish stripe.

Heath Thrush. *Lewin's Brit. birds.* ii. *tab.* 63.
Reſembles the laſt, but is heavier; the neck not ſo long, the chin whiter, acroſs the eyes a short blackish ſtripe, and the tail is half an inch shorter.

63. T. *iliacus*. Above brown, beneath whitish, with blackish spots: over the eyes a whitish line: under-parts of the wings and sides reddish-orange.

Red-wing. *Lewin t.* 64. *Walcot. t.* 199. *Albin* 1. *t.* 35.
Length 8 inches and a half: *weight* near 2 ounces and a half.
Bill blackish, with a dusky baſe: *iris* hazel: under the *eyes* a dusky patch: lower part of the *belly* and *vent* white.

64. T. *pilaris*. Head grey, spotted with black: back and wings chesnut-brown: breast reddish-yellow, spotted with black: tail black, the outermost feathers whitish on the inner-margin at the tip.

Field fare. *Lewin. t.* 65. *Albin* 1. *t.* 36. *Walcot t.* 200.

Length 10 inches : *extent* 17 inches ; *weight* about 4 ounces.

Bill yellowish, tipt with black : *eyes* hazel : *neck* and *cheeks* grey : *throat* white : *quill-feathers* ruſty-brown, with paler edges : *rump* grey : *belly* and *vent* white : middle *tail-feathers* with a mixture of grey : *legs* dusky.

65. T. *Merula.* Black : bill and edges of the eyelids yellow.

Blackbird, Ouzel. *Br. Zool. pl.* 47. *Lewin t.* 60. *Walcot t.* 201.

Above 10 inches long. *Male,* when full grown, deep-black, with the bill, eyelids and mouth yellow ; the legs yellowish.

Female and young bird dark rusty-brown, with the bill and eyelids dusky. It is ſometimes varied with black and white, and ſometimes entirely white.

66. T. *torquatus.* Dusky-black : breast with a white patch, extending towards the neck : eyelids dusky.

Ring ouzel. *Lewin t.* 59. *Donovan t.* 61. *Walcot. t.* 202.

Length 11 inches : *extent* 17 inches : *weight*

Bill blackish yellow : *iris* hazel : *plumage* black, with a grey edge : *legs* brown. *Female* with the patch on the breaſt, light brown. In the young birds it is wanting.

67. T. *Cinclus.* Blackish brown : cheeks, throat, and breast white : upper-part of the belly reddish-brown, lower-part and tail blackish.

Water ouzel. *Lewin t.* 57. *Donovan t.* 24. *Walcot t.* 196.

Length above 7 inches : extent 11 : *weight* 2 ounces and a half.

Bill black : *iris* hazel : *head* and *neck* blackish-brown : *plumage* of the back and wings edged with dark grey : *legs* on the fore-part and toes whitish, dusky behind. In the young bird the belly is white.

68. T. *roseus.* Head slightly crested behind : body pale rose-colour: head, neck, wings, and tail, glossy black

Roſe-coloured Ouzel. *Brit. Zool. app. t.* 5. *Lewin t.* 58.

Length 8 inches ; leſs than the blackbird.

Bill dirty flesh-colour, tipt with black : *iris* pale : *head. creſt, neck, wings* and *tail* black, glossed with a changeable blue purple, and green : *back, rump, shoulders, breast* and *belly* pale roſy, with a few black ſpots : *legs* dirty orange : *claws* hooked, brown.

17. AMPELIS. *Chatterer.*

69. A. *garrulus.* Head slightly crested behind : body reddish-grey : back and wings dusky : throat and tail black : secondary quill-feathers with a membranous vermilion tip.

Waxen Chatterer. *Br. Zool. t.* 48. *Lewin t.* 66. *Donovan t.* 11.

Length 8 inches : size of a ſtarling.

Bill black : *iris* reddish : *lores* black : *front* reddish : *chin* black, edged with white above : middle of the *back* and *shoulders* dusky : *wing-coverts* tipt with white : *quills* black, 3 first tipt with white, 6 next edged with yellow on the outer edge, and with white on the inner ; 6 or 8 of the ſecondaries with the shafts ending in flat membranous fine red appendages : *rump* and *vent* grey : *tail* black, whitish at the end, tipt with yellow, the under-coverts cheſnut : *legs* blackish.

18. LOXIA. *Grosbeak.*

70. L. *curvirostra.* Mandibles crossing each other : body variegated with orange, yellow and green : wings and forked tail dusky.

Croſs-bill. *Br. Zool. t.* 49. *Lewin t.* 67. *Donovan t.* 39.
Length 7 inches : *extent* 13 inches : *weight* near 2 ounces.
Bill dusky, the mandibles hooked and croſsing each other : *iris* dusky : *head* and *neck* variable red orange and yellowish : *back* and *wing-coverts* more or leſs olive-green, with dusky marks : *rump* orange : *vent* whitish : under *tail-coverts* with dusky ſpots : *legs* dusky : *claws* black.
Female dull olive-green where the male is red : wings and tail dull brown : belly paliſh-green.

71. L. *falcirostra*. **Mandibles crossing each other : body crimson, with a whitish mixture : wings black, with 2 white bands; the secondary feathers tipt with white : tail black.**

White-winged Crossbill. *Dixon Voy. t. p.* 356.
Shot near Belfast, in Jan. 1802. *Linn. Trans.* 7. *p.* 309.
Length 5 inches 3 quarters : size of a goldfinch.
Bill dusky, with a ſtreak of brown from the baſe to the eye: *plumage* white, with broad crimſon margins, having the appearance of an undulate mixture of both colours : *rump* pale crimſon : *vent* dirty white : *wings* with an oblique white band from the shoulders, and a ſecond short one below : ſecondary *quill-feathers* tipt with white : *legs* brown. *Female* brown above, beneath and vent yellowish : chin pale.

72. L. *Coccothraustes*. **Chesnut brown, beneath purplish-grey : chin black : wings with a white stripe : the middle-feathers rhombic at the points : tail-feathers black at the base on the thinner side.**

Haw finch. *Lewin* iii. *t.* 66. *Donovan t.* 43. *Walcot t.* 206.
Length 7 inches : *extent* 13 : *weight* near 2 ounces.
Bill very ſtrong and thick, pale dull pink : *iris* grey : *orbits* black : sides and back of the *neck* grey : *rump* pale cheſnut : middle *quill-feathers* truncate, angular, curled at the edges, dark blue : greater-ones black, marked with white on the inner-webs : lesser *wing-coverts* white : *tail* short, black, tipt with white on the inner-webs : *legs* red-brown : *claws* black.

73. L. *Enucleator*. **Crimson, with black spots on the back and shoulders : belly and vent cinereous : wings black, with 2 white stripes : tail blackish, with a whitish margin.**

Pine Grosbeak. *Br. Zool. t.* 49. *Lewin t.* 68. *Donov. t.* 17.
Length above 7 inches : *weight* more than 2 ounces.
Bill dusky : *iris* hazel : *head, neck, breaſt* and *rump* crimſon : feathers of the back and lesser wing-coverts black with a reddish border : *quills* dusky, with a dirty-white outer edge : *tail* a little forked : *legs* short, dusky. *Female* greenish-brown, with here and there a reddish or yellowish tinge.

74. L. *chloris*. **Yellowish-green ; outer quill-feathers bright yellow on the outer-webs : tail dusky, the outer-feathers yellow on the outer-webs.**

Green finch, *Lewin t.* 70. *Albin* 1. *t.* 58. *Walcot t.* 208.
Bill pale horn-colour : *iris* hazel : sides of the *neck* inclining to grey : *belly* greenish-white : *wing-coverts* grey : *rump* yellowish : *legs* flesh-colour. *Female* dusky-green.

75. L. *Pyrrhula*. **Crown, front and chin, wings and tail black : neck and back grey : wing-coverts with a white line : rump and vent white : breast and belly of the male red, of the female rusty-brown.**

Bulfinch. *Lewin t.* 69. *Albin t.* 59. 6. *Walcot. t.* 209.

Hardly 6 inches long. *Bill* black : *iris* dusky : *orbits* black : *wing-coverts* tipt with white, forming a line above the quills.

Female dirty brown : crown black : rump white.

19. EMBERIZA. *Bunting.*

76. E. *Nivalis.* White : front pale chesnut : back black, with pale chesnut spots : outer webs of the primary quill-feathers, and middle tail-feathers black.

Snow Bunting. *Br. Zool. t.* 50. *Lewin t.* 81. *Walcot. t.* 211.

Weight about an ounce and a quarter : size of the chaffinch. *Bill* yellowish, tipt with black : *iris* brown : *orbits* yellowish : *front* pale chesnut : *body* above with oblong blackish ſpots : *rump* and beneath white : greater *quills* black, white at the baſe ; ſecondaries white, with a black ſpot on the inner-webs : outer *tail-feathers* white, with a dusky ſpot near the end : *legs* blackish.

Female dull cheſnut : brown above, paler underneath.

2. Head, neck, cheeks and back tawny, with black ſpots : breast pale cheſnut : lesser wing-coverts brown with white tips : greater white with black tips : quills dull black.

Tawny Bunting. *Lewin t.* 81.* *Donovan t.* 27. *Walcot. t.* 211.

3. Neck and back grey with black spots : throat white : breast and belly with flame-colour waves : at the ſetting on of the wings grey: 5 first feathers blackish-brown, the rest white with a little brown at the point : 3 outer tail-feathers white, the rest dark-brown.

Mounting Bunting. *Mort. North. t.* 13. *f.* 1. *Walcot. t.* 210.

Obs. Theſe 2 varieties have been considered as distinct ſpecies ; but till future obſervations shall clearly eſtablish them as ſuch, we muſt with Dr. Latham, considcr 2 as the youug male bird, and 3 a very old bird of E. Nivalis.

77. E. *citrinella.* Crown, throat and belly yellow : tail-feathers blackish, the 2 outer-ones with an acute white spot on the inner side.

Yellow hammer. *Br. Zool. t.* 50. *Lewin. t.* 84. *Donovan. t.* 119.

Length 6 inches : *extent* 10 inches : *weight* 7 drachms.

Bill bluish : *iris* hazel : back part and sides of the *head* tinged with green : *back* and *shoulders* yellow-brown, with dark-brown ſpots : *rump* dull orange : *wing-coverts* cheſnut, with black ſpots : *quills* dusky, the primaries edged with greenish-yellow on the outer-webs, ſecondaries with rusty-brown : *tail* a little forked, dusky with a greenish-yellow edge : *legs* pale brown. *Female* dull brown.

2. Head and neck olive-green : breast brown : belly pale greenish-brown : tail dusky,

Green-headed Bunting. *Lewin. t.* 84.* *Brown. ill. t.* 30.

78. E. *Cirlus.* Above varied, beneath yellow, spotted on the breast : over the eyes a yellow stripe : 2 outer tail-feathers with a white wedge-shaped spot.

Cirl Bunting. *Montague Ornith. Dict.* i. *tab. frontiſp.*

Length 6 inches and a half : *weight* about 7 drachms.

Bill bluish, pale beneath : *iris* hazel : *crown*, *nape*, and upper-part of the *breast* olive-green, the first with dusky streaks : acroſs the *eye* a dusky streak, with a yellow one above and beneath it : *throat* black, with a bright-yellow band below : *back* and *ſcapulars* cheſnut, the first with dusky streaks : *rump* olive-brown : leſser *wing-coverts* olive-green, greater dusky with their outer webs cheſnut : greater *quills* dusky, edged with green on the outer-webs ; lesser cheſnut, dusky down the middle : *breast* cheſnut mixed with yellow: 2 middle *tail-feathers* cheſnut, the rest black, the 2 outer-ones with an oblique white bar, the outmoſt white on the outer-web: *legs* brown.

Female beneath with blackish ſpots : chin and vent whitish.

79. E. *miliaria*. Pale olive-brown with blackish spots, beneath yellowish-white with oblong dusky spots: orbits rufous-brown.

Common Bunting. *Lewin t.* 83. *Donovan t.* 50. *Walcot t.* 213.

Length 7 inches and a half: *extent* 11 and a half: *weight* nearly 2 ounces. *Bill* brown: *iris* dark hazel: *belly* dirty-white, without ſpots: *quill-feathers* dusky, with paler edges: *tail* a little forked, dusky, the outer-feathers pale: *legs* dull yellow.

80. E. *Schœniclus*. Head and throat black: back and wings reddish-brown with black spots: underneath whitish: 2 outer tail-feathers with a white wedge-shaped spot.

Reed Bunting. *Lewin t.* 82. *Walcot t.* 214. *Albin* ii. *t.* 51.

Length 6 inches: *weight* nearly 5 drachms and a half. *Bill* dusky: *iris* hazel: from the corners of the *mouth* a white ſtripe encircling the head: *breast* and *belly* whitish, the sides darker, with a few brown lines: feathers of the *back* blackish, with broad reddish-brown borders: *shoulders* cheſnut: *quill-feathers* dusky, with tawny borders: *tail* blackish, 2 middle-feathers with broad rufous borders, the others tawny on the outer-webs, 2 outer-ones with a white oblique ſpot towards the ends: *legs* reddish-brown.

Female head rufous with dusky streaks, without the white circle round the nape, and brownish beneath.

20. FRINGILLA. *Finch.*

81. F. *domestica*. Body black and grey, a white mark behind the eyes: wings and tail brown, the former with a single white band.

Houſe Sparrow. *Br. Zool. t.* 51. *Lewin t.* 71. *Donovan t.* 88.

Length about 6 inches: *weight* nearly 7 drachms. *Bill* dusky: *iris* hazel: *crown* and *cheeks* grey: round the *eyes* and from them to the bill black: *throat* black; *nape* and *neck* cheſnut: *back* and *wing-coverts* mixed rufous and black; leſser coverts tipt with white forming a band acroſs the wings: *belly* grey: *tail* dusky, edged with grey: *legs* brown. *Female* dull brown, with a white line above the eye, without the black near the eye and on the throat. Is sometimes found entirely white.

82. F. *montana*. Body black and grey: head and nape chesnut: wings and tail brown, the former with a double white band.

Tree Sparrow. *Br. Zool. t.* 52. *Lewin t.* 72. *Donovan t.* 88.

Leſs than the laſt. *Bill* dusky: *iris* hazel: *chin* black: behind the *eyes* a black ſpot: *cheeks* and sides of the head white: *back* and *shoulders* rufous-brown, with black ſpots: *wing-coverts* rufous, edged with black: *quills* blackish with rufous borders: *breast* and *belly* dull white: *tail* dusky rufous, edged with cheſnut: *legs* pale-red brown. *Female* without the black on the chin and sides of the head.

83. F. *cœlebs*. Wings and tail blackish: quill-feathers marked with white on both webs at the base: outermost tail-feathers obliquely marked with white.

Chaffinch, *Lewin t.* 73. *Albin* i. *t.* 63. *Walcot t.* 217.

Leſs than the Sparrow. *Bill* bluish, tipt with black: *iris* hazel: *front* black: *crown*, *nape* and sides of the *neck* bluish-grey: *chin*, *throat* and *breast* dull orange: *back* dull cheſnut: *shoulders* white; ſecondary *wing-coverts* tipt with white: *quills* dusky, with a greenish yellow edge on the outer-webs: middle *tail-feathers* edged and tipt with grey: *rump* greenish: *belly* dirty white: *legs* brownish.

Female without the grey on the head and neck, and the throat and breast dirty white.

84. F. *Montifringilla*. Black with rufous and grey spots: belly and rump white: throat, breast and shoulders pale rufous: lateral tail-feathers blackish, edged with white on the outer webs.

Mountain Finch, Brambling. *Lewin t.* 74. *Walcot t.* 218.

Length about 6 inches: rather larger than the Chaffinch.

Bill yellowish, tipt with black: *iris* dusky: *head, nape, throat* and *back* black, the feathers more or leſs with an orange-buff edge: lesser *wing-coverts* pale rufous, greater-ones black with orange tips: *quills* black, edged with yellow on the outer-webs, the first 3 or 4 with a white mark on the outer-webs, forming an oblique white bar: *belly* and *rump* whitish: *sides* with a few black ſpots: *tail* black, the 2 middle-feathers with a grey edge and tip: *legs* brownish. *Female* grey on the head and nape, with 2 dusky lines from the latter: plumage dusky with pale yellow edges, and without the orange or yellow.

85. F. *Carduelis*. Crown black: front and chin orange: quill-feathers rich yellow on the outer webs, except the outermost: 2 outer tail-feathers white in the middle, the middle-ones tipt with white.

Goldfinch, Thistlefinch. *Lewin t.* 75. *Donovan t.* 103.

Length 5 inches and a half: *extent* of wings 9 inches.

Bill white, tipt with black: *iris* dusky: from the bill to the *eyes* a black stripe: *cheeks* white, bounded by a black line reaching half-way round the neck: *back* brown: *breast* whitish in the middle: *sides*, lower part of the breast and belly pale brown: *vent* white: greater *wing-coverts* black, with pale tawny tips; lesser-ones tipt with yellow: *quills* blackish, tipt with white: *tail* black, more or leſs marked with white: *legs* pale brown. *Female* with the feathers at the end of the bill brown, and the black and yellow paler.

Young bird with the crown grey, and without the ſcarlet front and chin.

86. F. *Spinus*. Greenish-yellow, with dusky spots: quill-feathers yellow in the middle, the first 4 immaculate: tail-feathers yellow at the base, tipt with black.

Siskin, Aberdevine. *Br. Zool. t.* 53. *Lewin t.* 76.

Length 4 inches 3 quarters: size of the linnet.

Bill white, tipt with black: *crown* black: *rump* yellowish: *shoulders* with a broad yellow band: *throat*, *breast* and *cheeks* greenish-yellow: *belly* whitish, with a few black marks: *quills* blackish, the outer edges yellow: 2 middle *tail-feathers* black, the rest rich yellow on the upper half and tipt with black: *legs* blackish.

Female, head and back greenish-grey with brown marks: throat and sides whitish.

87. F. *Linota*. Chesnut-brown, beneath yellowish-brown: wings with a longitudinal white band: tail-feathers dusky with white edges.

Linnet. *Lewin. t.* 77. *Albin t. p.* 31. *Walcot t.* 221.

Length 6 inches: *extent* of wings about 10 inches.

Bill dusky: *iris* hazel: *front* dusky, with a few dull red ſpots: *head* and *cheeks* grey with paler lines: *back* dark cheſnut, with dusky ſpots: *throat* and *belly* yellowish-white: *breast* more or less blood red: *vent* white: outer-webs of the *quills* white nearly their whole length: 2 middle *tail-feathers* bordered with dull red: *legs* dark-brown. *Female* and young bird without the red on the breast, which is marked with brown lines. Is probably only a variety of the next.

88. F. *cannabina.* Chesnut brown, beneath rufous-white: front and breast more or less red: wings with a longitudinal white band: tail-feathers dusky, edged with white.

Greater Redpole. *Br. Zool. t.* 54. *Lewin t.* 78. *Walcot t.* 222.

Length 6 inches: *extent* nearly 10: *weight* 5 drachms.

Bill bluish: *iris* hazel: *head* and *neck* grey; *front* and *breaſt* with roſy ſpots: *belly* pale rufous: *vent* whitish: *quills* more or leſs white on the outer-webs: 4 middle *tail-feathers* dark brown: *legs* brown. *Female* and young bird without the red on the front and breast.

89. F. *linaria.* Above rufous-brown with dusky spots: chin black: front and breast red: wings with a double white band.

Lesser Redpole. *Br. Zool. t.* 54. *Lewin t.* 79. *Donovan t.* 114.

Length 5 inches: *extent* 7 and-a-half: *weight* 2 drachms and a half.

Bill dull yellow: *iris* hazel: *throat* and *belly* whitish: *sides* with brown lines: *wing-coverts* dusky tipt with white, forming 2 bars on the wings: *quill* and *tail-feathers* edged with dull white: *legs* dusky. *Female* saffron on the front, and without the red on the breast.

90. F. *Montium.* Above rufous with dusky marks, beneath whitish: feathers of the lower part of the neck black in the middle: wings with a whitish band: rump red.

Twite. *Br. Zool. t.* 53. *Lewin t,* 80. *Walcot. t.* 216.

Length nearly 6 inches: rather larger than the linnet.

Bill yellowish, with a dusky tip: *iris* hazel: *crown* and *rump* red: *feathers* of the upper-parts dusky, edged with rufous: *throat* pale rufous with blackish ſpots: *eyes* with a pale brown ſpot above and below: lesser *wing-coverts* with a dull white edge: *quills* and *tail-feathers* with dull white outer-webs: *legs* blackish.

Female dull brown, without the red on the rump.

21. MUSCICAPA. *Flycatcher.*

91. M. *Grisola.* Above grey-brown, with dusky spots on the head; beneath dull white, with dusky spots on the breast and sides: rump inclining to rufous.

Spotted Flycatcher. *Lewin t.* 93. *Walcot. t.* 224.

Length not quite 6 inches: size of a titlark.

Bill dusky, broad at the baſe, carinate down the middle: *iris* hazel: *mouth* yellow within: *sides* under the wings with a dull rufous tinge: *wing-coverts* and *tail-feathers* dusky, with paler edges: *legs* black. *Male* with a whitish ring round the neck.

92. M. *atricapilla.* Above black, beneath white: front and large patch on the wings white: outermost tail-feathers white on the outer-webs.

Pied Flycatcher. *Lewin t.* 94. *Donovan t.* 22. *Walcot. t.* 225.

Length nearly 5 inches: size of the Linnet.

Bill black: *iris* hazel: *cheeks* black: *wings* dusky: upper *tail-coverts* mixed black and white; *legs* back: *Female* dusky-brown where the male is black, and the white more obſcure and hardly visible on the front.

22. ALAUDA. *Lark.*

93. A. *arvensis.* Rufous-brown spotted with black: chin, belly, and vent yellowish-white: 2 outer tail-feathers white down their outer-webs, the middle-ones with light rufous margins.

Sky-lark *Lewin t.* 86. *Albin t.* 41. *Walcot. t.* 189.

Length above 7 inches : *extent* nearly 13 : *weight* an oz. and a half. *Bill* dusky, the baſe of the lower mandible yellowish : *iris* hazel : *head* brown, with roundish black ſpots : *neck* and *shoulders* greyish-brown : *coverts* and *wings* reddish-brown, with paler margins : *throat* and *breast* pale yellowish-brown, with dark ſtreaks : 2 outer *tail-feathers* edged with white : *legs* pale brown : *hind-claw* very long, and nearly straight.

94. A. *arborea.* Ferruginous, with oblong blackish spots: from the bill over the eyes and surrounding the nape a yellowish white band: quills and tail-feathers blackish.

Wood Lark. *Lewin t.* 88. *Albin t.* 42. *Walcot t.* 190.

Length 6 inches : *extent* 13 inches ; *weight* 8 drachms. *Bill* dusky, yellowish at the baſe of the lower mandible : *iris* dark hazel : *crown* and *back* dark rufous, with oblong black ſpots : under the *ears* a blackish patch: *shoulders* grey-brown : *wing-coverts* dark-brown, with yellow-brown margins : *throat* and *breast* pale rufous, with oblong dusky ſpots : *belly* and *vent* dirty white : *tail* very short, the 4 outer-feathers blackish : *legs* yellowish : *hind-claw* long, nearly straight.

95. A. *pratensis.* Above green brown, with dusky marks; throat, belly and vent white : 2 outmost tail-feathers white on the outer-webs : over the eyes a palish streak.

Tit Lark. *Lewin t.* 91. *Albin t.* 43. *Walcot t.* 191.

Length 5 inches and a half : *extent* 9 : *weight* nearly 5 drachms. *Bill* dusky, yellowish at the baſe of the lower-mandible, with a pale line from its baſe extending over the eye : sides of the *neck* and *breast* dirty yellowish-white, with oblong dusky ſpots : *quills* and *coverts* dusky-brown, with paler margins : *tail* blackish, the outer-feathers white down the outer-edge, and on the inner edge half way, the ſecondaries with a ſpot of white on the tip : *legs* yellowish-brown : *hind-claw* hardly longer than the rest.

96. A. *trivialis.* Above dull olive-brown with dusky spots, beneath pale ferruginous with dusky spots : outermost tail-feathers white for more than half their length, the secondaries at the tip.

Pipit Lark. *Albin t.* 44. *Walcot t.* 194.

Length 6 inches and a half : *weight* about 5 drachms and a half. *Bill* dusky, the sides and baſe of the upper mandible dull yellow : *iris* hazel : sides of the *neck*, *breast* and *sides* with oblong dusky ſpots : *coverts* and *quills* dusky with olive margins : 2 middle *tail-feathers* dusky, with paler margins, the rest except the outer-ones with a greenish-brown edge : *legs* dull yellow : *hind-claw* a little curved.

97. A. *Obscura.* Olive-brown, with blackish marks; beneath dirty yellow : throat, breast, and sides of the neck with oblong brownish spots : outmost tail-feathers greyish-white half their length, the secondaries at the tip.

Graſshopper Lark. *Lewin t.* 90. *Donovan t.* 76.

Length nearly 7 inches : *weight* about 7 drachms. *Bill* thin, long, brown with a deeper tip : *iris* hazel : above the *eye* and beneath the *ear* a pale ſtroke : sides of the *neck*, *throat* and *breast* yellow olive with oblong brown ſpots : *wing-coverts* and *quills* dusky olive with pale edges : *belly* and vent dirty white : 2 middle *tail-feathers* dark brown : *legs* dusky : *hind-claw* long, curved,

98. A. *minor*. Yellow-brown with dusky spots: throat and breast ochre-yellow with brown spots: chin and belly yellowish white.

Field Lark. *Lewin t.* 92. *Walcot t.* 192.

Length 6 inches and a half: *weight* nearly 6 drachms.

Bill dusky, beneath whitish: *iris* hazel: *wing-coverts* tipt with dirty white: *rump* not ſpotted: outmoſt *tail-feathers* half white. ſecondaries tipt with white: *legs* yellow brown: *hind-claw* short, curved.

99. A. *rubra*. Rufous-brown with dusky spots: sides of the neck and breast ferruginous with dusky spots: cheeks dusky: over the eye a pale rufous streak.

Red Lark. *Lewin t.* 89. *Edwards t.* 297.

Size of the Sky Lark. *Bill* whitish beneath at the baſe: *iris* hazel: *chin* and *throat* pale ferruginous: from the bill acroſs the *eyes* a dusky ſtreak: *wings* with 2 ſmall whitish lines acroſs them: greater *quills* dusky with a yellow-white edge, the reſt with a rufous margin: *belly* and *vent* dirty white: middle *tail-feathers* blackish with rufous margins, outer-ones white, ſecondaries white on the outer-web and tip, the rest dusky: *legs* reddish-brown: *hind-calw* as long as the toe, a little curved.

100. A. *cristata*. Head crested: pale chesnut, with dusky spots: belly and vent dirty white, unspotted: tail-feathers blackish, the 2 outmost white on the outer margins.

Greater creſted Lark. *Lewin t.* 85. *Albin t.* 52.

Length 6 inches and 3 quarters: larger than the Skylark. *Bill* dusky above, yellowish beneath: *iris* hazel: *crest* compoſed of 7-12 feathers nearly half an inch in length: *neck* and *shoulders* grey-cheſnut: *wing-coverts* brownish-black, with a cheſnut edge: *throat* and *breast* pale yellow, with a few black spots: *tail* about 2 inches long: *legs* brown: *hind-claw* long.

101. A. *cristatella*. Head crested: above brown with blackish spots; beneath pale ferruginous: over the eyes a pale line: quill and tail-feathers brown: legs reddish.

Lesser crested Lark. *Lewin t.* 87. *Pl. enlum.* 503. *f.* 2.

Leſs than the last. *Bill* dark horn-colour: *iris* hazel: *crest* longer: *wing-coverts* rich-brown with buff edges: *throat* and *breast* pale brown, with oblong blackish ſpots: *belly* and *vent* dull white: *tail* short, the outer-feathers edged with white: *legs* and *toes* short, slender: *hind-claw* long, slightly curved.

23. MOTACILLA. *Wagtail.*

102. M. *alba*. Chin, lower part of the neck and breast black: 2 outer tail-feathers obliquely white for more than half their length.

White Wagtail. *Br. Zool. t.* 55. *Lewin t.* 95. *Donovan t.* 5.

Length 7 inches and a half: *weight* nearly 6 drachms.

Bill black: *iris* dusky: *front*, *cheeks*, and sides of the *neck* white: *crown* and upper and under sides of the *neck* black: *back* greyish-black: *belly* and *vent* white: greater *wing-coverts* black, tipt with white: *quills* dusky, the inner-ones bordered with white on the outer-webs: *tail* black, except the outer-feathers: *legs* black.

Female dusky where the male is black, and more grey above. In the autumn there is only a black creſcent-like mark on the breaſt.

103. M. *Boarula*. Above dark grey, beneath buff yellow: vent and rump pale yellow: outmost tail-feathers entirely white, secondaries on the inner-webs.

Grey Wagtail. *Lewin t.* 96. *Donovan t.* 40.

Length near 8 inches : *extent* 10 : *weight* about 5 drachms.

Bill brown : *iris* dark hazel : *cheeks* dark grey : *chin* and *throat* buff in the winter becoming black in the ſummer : *rump* and *vent* rich yellow : *wing-coverts* and *quills* blackish, with pale margins : middle *tail-feathers* dusky, with a yellow edge towards the baſe : *legs* pale brown.

104. M. *flava.* Above pale olive-green, beneath rich yellow : across the eyes an olive-green stripe : 2 outer tail-feathers obliquely white for more than half their length.

Yellow Wagtail. *Br. Zool. t.* 55. *Lewin t.* 97. *Donovan t.* 15.

Length near 7 inches : *extent* 10 : *weight* about 5 drachms.

Bill black : *iris* hazel : over the *eyes* a yellow streak ; *throat*, in the ſummer, with black ſpots : *quill-feathers* dusky, with paler edges : 2 outer *tail-feathers* obliquely black and white, the rest dusky : *legs* blackish. *Female* leſs bright in the colours.

24. SYLVIA. *Warbler.*

105. S. *Luscinia.* Above reddish-brown, beneath pale yellowish-ash : tail deep tawny-red.

Nightingale. *Lewin* iii. *t.* 99. *Donovan t.* 108. *Walcot t.* 229.

Length 7 inches : *extent* 10 inches : *weight* 6 drachms.

Bill dusky : *iris* hazel : *quills* and *coverts* reddish-brown, with paler margins : *vent* whitish : *knees* grey : *legs* long, light brown.

106. S. *hortensis.* Above light olive-brown, beneath dirty-white : from the bill over the eyes a whitish streak : tail-feathers brown with a grey brown outer margin, the outmost obliquely half white.

Greater Pettichaps. *Lewin t.* 101. *Walcot. t.* 230.

Length 6 inches : *extent* 9 inches : *weight* 5 drachms.

Bill dusky, the baſe of the lower mandible yellowish : *iris* hazel : *mouth* red or yellow within : *head* darker than the back : *quills* dark-brown with paler margins : *belly* and *vent* white : *legs* lead-colour.

107. S. *Hippolais.* Above greenish-brown : throat and breast dirty yellowish white : breast and belly silvery white : above and below the eyes a yellowish streak : quill and tail-feathers dusky, with a dirty yellow margin.

Leſser Pettichaps. *Lewin t.* 102. *Donov. t.* 14.

Length 5 inches : *extent* nearly 6 inches : *weight* near 3 drachms.

Bill dusky ; *iris* hazel : *chin* whitish : lower *wing-coverts* yellowish : *legs* dusky

2. Paler above : thighs brown : tail brown : eyebrows white.

108. S. *sylvicola.* Yellow-green : throat and cheeks yellow : belly and vent pure white : from the bill over the eye a bright brimstone streak.

Wood Wren. *Linn. Trans.* 11. *p.* 245. *tab.* 24.

Length 5 inches and a quarter : *weight* near 3 drachms.

Bill dusky : *iris* hazel : through the *eyes* a bright ſulphur ſtreak, but not under them as in the laſt : upper-part of the *breaſt* yellowish-white : *quill-feathers* dusky, edged on the outer-webs with yellow-green : *tail-feathers* dusky, edged with green on the outer webs except the first, and with white on the inner: *legs* horn-colour.

109. S. *atricapilla.* Crown black, of the female chesnut : body above grey greenish-brown, of the female inclining to olive : beneath cinereous.

Black-cap. *Lewin. t.* 100. *Walcot t.* 234.

Length 6 inches : *extent* 10 inches : *weight* half an ounce.

Bill brown : *iris* dark hazel : *cheeks* and *neck* greyish-brown : *chin* whitish : *quill* and *tail-feathers* dusky, with a greenish-brown margin : *belly* and *vent* whitish : *legs* lead-colour.

110. S. *arundinacea*. Above olive-brown, beneath yellowish-white : lores and orbits whitish-brown : wings with a tawny-yellow band in the middle underneath : tail brown, somewhat wedge-form.

Reed Wren. *Lewin t.* 113. *Gent. Mag. Vol.* 55. *t. p.* 640.

Length hardly 5 inches and a half : *weight* 3 drachms.

Bill dusky above, yellowish beneath, broad at the baſe : *iris* hazel : *sides* inclining to rufous-brown : from the bill to the *eye* a lightish streak : *quill* and *tail-feathers* dusky, with olive-brown margins : *legs* dusky : *ſoles* greenish-yellow.

111. S. *modularis*. Above grey-brown, with dusky spots : wing-coverts greyish at the tips : throat and breast bluish-grey.

Hedge Sparrow. *Lewin t.* 103. *Albin* 1. *t.* 59. *Walcot t.* 232.

Length 5 inches and a half : *extent* near 9 : *weight* 6 drachms

Bill dusky : *iris* hazel : *chin* and sides of the *neck* greyish : *quill* and *tail-feathers* dusky, with dull rufous margins : *belly* dirty white : *legs* dull flesh-colour.

112. S. *Phœnicurus*. Front white : chin and throat black : head and back bluish-grey : breast, rump, and tail rufous.

Redstart. *Lewin t.* 104. *Donovan t.* 82. *Walcot t.* 233.

Length 6 inches : *extent* 9 and a half : *weight* near 4 drachms.

Bill black : *iris* dark hazel : *cheeks* black : *sides* rufous : *quills* brown with pale edges : *vent* whitish : 2 middle *tail-feathers* brown, with a rufous margin : *legs* blackish. *Female*, chin whitish, and the rufous colour leſs bright.

113. S. *cinerea*. *var*. Above brown-grey, with a rufous shade ; beneath white, with a reddish tinge : outmost tail-feathers entirely white on the outer-web, and half way down the inner.

White-throat. *Lewin t.* 105. *Albin t.* 58. *Walcot t.* 235.

Length near 6 inches : *extent* near 9 : *weight* about 4 drachms.

Bill dusky, whitish beneath : *iris* hazel : *wing-coverts* dark-brown, with a dull rufous margin : *quills* dusky, edged with grey-brown : *throat* white : *breast* and *belly* with often a roſy tinge : *tail* dusky : *legs* pale brown.

114. S. *Sylviella*. Head and rump grey : back, wings and tail grey-brown : beneath dirty white : 2 middle tail-feathers shorter and subulate.

Lesser White-throat. *Lewin t.* 106. *Donovan t.* 86.

Length 5 inches and a quarter : *weight* 3 drachms and a quarter.

Bill dusky : *iris* yellowish : *quill* and *tail-feathers* darker than the back, with a grey edge ; the outer-feather of the latter white on the outer-web, and more than half of the inner : from the *chin* to the *vent* pure white : *legs* brown lead-colour.

115. S. *Locustella*. Olive-brown with dusky spots ; beneath yellowish-white, darker on the breast ; tail wedge-shaped, with pointed feathers.

Grasshopper Warbler. *Lewin t.* 98. *Br. Zool. ſol. t. Q. f.* 5.

Length 5 inches and a half : *weight* 3 drachms and a quarter.

Bill dusky above, pale beneath : *iris* hazel : from the bill to the *eyes* a yellowish streak : *breast* and *sides* inclining to brown, with a few dark ſtreaks : *quills* and *tail* dusky olive-brown with paler outer margins : *legs* pale brown.

116. S. *salicaria.* Yellowish-brown with dusky spots, beneath dirty white : tail-coverts pale tawny : over the eye a white stripe.

Sedge Warbler. *Lewin t.* 107. *Donov. t.* 48.

Bill black, pale beneath : *cheeks* pale brown : over the *eyebrows* a black stripe : *breast* and *sides* darker : *quills* and *tail* dusky, the former edged with olive-brown : *tail* a little wedge-form : *legs* dusky.

117. S. *Dartfordiensis.* Deep rufous-brown, beneath ferruginous : belly white in the middle : iris and eyelids red : legs yellow.

Dartford Warbler. *Lewin. t.* 108. *Br. Zool. t.* 56. *Donovan. t.* 10.

Bill black, whitish at the baſe of the upper mandible : *throat* with a few whitish ſpots : *cheeks* dark grey : *quills* dusky, edged with dark grey : *ſpurious wing* white : *tail* wedge-form, brown, the outmoſt feathers white on the outer edge.

118. S. *rubecula.* Greyish-brown, belly white : front, chin throat and breast deep orange.

Red-breast. *Lewin t.* 109. *Donovan t.* 123. *Walcot. t.* 238.

Length 6 inches : *extent* of wings 9 inches.

Bill black : *iris* dark hazel : *body* above brownish-ash, with a tinge of green : *wings* darker, with paler margins : *legs* dusky.

119. S. *rubicola.* Deep tawny spotted with black, beneath dull rufous : throat black : sides of the neck and spot on the wings white.

Stone chat. *Lewin t.* 110. *Donovan t.* 92. *Walcot. t.* 239.

Length 5 inches and a half : *extent* near 9 : *weight* half an ounce.

Bill black : *iris* dusky : *head* and *throat*, of the male black : each side the *neck* a broad band of white : *quill* and *tail-feathers* dusky, with tawny edges : *rump*, of the male, white : *belly* pale rufous : *vent* whitish : *legs* black.

120. S. *Rubetra.* Dull rufous spotted with black, throat and breast ferruginous : over the eyes and from the chin down the sides of the neck a white stripe : wings with two white spots.

Whin chat. *Lewin t.* 111. *Donov. t.* 60. *Walcot. t.* 240.

Length 5 inches : *extent* 9 inches : *weight* 4 drachms and a half.

Bill black : *iris* hazel : *cheeks* black : *quills* dusky, with rufous margins : *tail* blackish, white on the lower part except the 2 middle feathers : *belly* and *vent* whitish, with a ferruginous tinge : *legs* black.

121. S. *Œnanthe.* Head and back bluish-grey : cheeks black : over the eyes a dirty-white stripe : breast and belly yellowish-white : rump and base of the tail white.

Wheat-ear. *Lewin t.* 112. *Albin t.* 54, 55. *Walcot. t.* 241.

Length above 6 inches : *extent* near 12 : *weight* near 7 drachms.

Bill black : *iris* hazel : from the *bill* a black stripe, forming a black patch round the eyes : *front* dirty white : *wings* and *coverts* dusky, with reddish-brown edges : *breast* with a reddish tinge : *vent* white : 2 middle *tail-feathers* white with a black baſe, the rest white tipt with black : *legs* blackish.

2. Mixed fulvous and whitish : lower part of the neck with grey ſpots : 2 middle tail-feathers entirely black.

122. S. *Troglodytes.* Reddish-brown, crossed with ob-

scure dusky lines: throat and breast paler: over the eyes a pale reddish-white stripe.

Wren. *Lewin t.* 115. *Albin t.* 53. *B. Walcot t.* 242.

Length above 4 inches: *extent* 6 and a half: *weight* not 3 drachms. *Bill* and *legs* dusky: *iris* dark hazel: *cheeks* marked with dirty white mixed with ferruginous: *quill-feathers* with black and reddish white undulate lines: *tail* crossed with dusky lines.

123. S. *Regulus.* Greenish, beneath dirty white: crown orange, of the female bright yellow: secondary quill-feathers yellow on the outer margin, white in the middle.

Golden-crested Wren. *Lewin t.* 116. *Donov. t.* 4. *Walcot. t.* 243.

Length 3 inches and a half: *extent* 5: *weight* 76 grains.

Bill blackish: *iris* hazel: *crown* orange in the middle, light yellow each side, bordered with black: *hind-head* and *neck* greyish-green: *front, chin* and *cheeks* whitish: *quills* dusky edged with green, the coverts tipt with white: *tail* dusky, the feathers edged with yellowish-green: *legs* yellowish.

124. S. *Trochilus.* Greenish yellow-brown, beneath white tinged with yellow: over the eyes a yellowish stripe: wing-coverts yellow.

2. Front, wings, and underneath pale yellow: back and tail pale brown. *Scotch wren. Edw. t.* 278. *f.* 2.

Yellow Wren. *Lewin t.* 114. *Donovan t.* 14. *Hayes t.* 38.

Length 5 inches: *weight* above 2 drachms and a half.

Bill dusky above, yellowish beneath: *iris* hazel: *breast* with a few yellowish streaks: *vent* white: *quills* and *tail-feathers* dusky edged with yellow: *legs* yellow-brown.

25. PARUS. *Titmouse.*

125. P. *cristatus.* Greenish-brown, belly and vent dirty-white: head crested, black spotted with white: throat and collar black.

Crested Titmouſe. *Lewin t.* 117. *Donovan t.* 26. *Albin t.* 57.

Length nearly 5 inches: *weight* 2 drachms and a half.

Bill blackish: *iris* dark hazel: *front* and *crown* white with black waved lines: *crest* pointed black, edged with white: *cheeks* white, with black marks: from the *eyes* a black stripe acroſs the cheeks, meeting another which passes down the sides of the neck: *quill* and *tail-feathers* darker than the back, with paler edges: *legs* lead-colour.

126. P. *major.* Olive-green, beneath green-yellow with a broad black stripe down the middle: head and throat black: cheeks white: wings with a white band.

2. Olive-brown, beneath dirty yellow: head black: temples grey: mandibles crossing each other. *Lewin* 1. *t. frontiſp.*

Great Titmouſe. *Lewin t.* 117. *Donovan t.* 69.

Length near 6 inches: *extent* 9: *weight* 10 drachms.

Bill black: *iris* hazel: *nape* yellowish: *rump* bluish-grey: *quill-feathers* dusky: *coverts* bluish, the larger tipt with white: *tail-feathers* dusky, all bluish on their outer-webs, except the outmoſt which are white: *vent* white: *legs* lead-colour.

127. P. *ater.* Bluish-grey, beneath yellowish white: head and throat glossy black: cheeks and patch on the hind-head white: wings with 2 white bars.

Cole Titmouſe. *Br. Zool. t.* 57. *Lewin t.* 119. *Walcot. t.* 79.

Length 4 inches: *extent* 7: *weight* above 2 drachms.

Bill black: *iris* hazel: *rump* greenish: lower part of the *belly* and *vent* white: *sides* yellowish; greater and lesser *wing-coverts* tipt with white; *quills* dusky with paler outer margins: *legs* lead-colour.

128. *P. palustris.* Rusty-grey, beneath dirty white: head and chin black: cheeks, sides of the neck and throat white.

Marsh Titmouſe. *Br. Zool. t.* 57. *Lewin t.* 120. *Walcot t.* 247.

Length 4 inches and a half: *extent* near 8: *weight* 2 dr. and a half. *Bill* black: *iris* hazel: *head* black, but not glossy: *chin* often spotted with white: *wings* with or without a grey band or two: *quill* and *tail-feathers* dusky-grey with paler outer margins: *legs* lead colour.

129. *P. cæruleus.* Crown, wings and tail blue: front and cheeks white: across the eyes and on the sides of the neck a black stripe: back yellowish-green: breast and belly yellow.

Tom-tit. *Brit. Zool. t.* 57. *Lewin t.* 121. *Walcot t.* 245.

Length 4 inches and a half: *extent* above 7: *weight* 3 drachms. *Bill* blackish; *iris* dark hazel: *crown* bounded by a circle of white: *wings* with a white bar: the primary quills white on the outer-margin: *legs* lead-colour.

130. *P. caudatus.* Purplish, with a broad black band down the back, beneath pale rosy: crown white, surrounded by a black band passing through the eyes: tail longer than the body.

Long-tailed Titmouſe. *Lewin t.* 122. *Donovan t.* 16.

Length near 6 inches: *extent* near 7: *weight* about 2 drachms. *Bill* short, thick, black: *iris* hazel, edges of the eye-lids yellow: *head* and *cheeks* white, with a few dark feathers: sides of the back dull purple: *throat* and under part of the *neck* white: greater *wing-coverts* brown, with a dull roſy edge, tipt with white: *quills* dusky, the inner-ones white on the outer edge: *tail* 3 inches long, the feathers very unequal in length, the 4 middle-ones black, the next with a white mark near the tip, the rest obliquely white on the outer-webs: *legs* blackish.

131. *P. biarmicus.* Rufous, chin and throat white: head hoary: beneath the eyes a tuft of black feathers pointing downwards: vent black: tail as long as the body.

Bearded Titmouſe. *Lewin t.* 123. *Donov. t.* 1. *Walcot t.* 248.

Length 6 inches and a quarter: *weight* 2 drachms and a half. *Bill* orange, a little curved: *iris* yellow: *breast* flesh-colour: *quills* dusky with pale edges, the inner-webs of the primaries white; ſecondaries with rufous edges: *tail* wedge-form, 3 inches long, the outer feathers more or leſs white: *legs* black. *Female* without the black tuft under the eyes: vent white.

26. HIRUNDO. *Swallow.*

132. *H. rustica.* With 3 toes forwards: above black with a purplish gloss, beneath whitish: front and chin ferruginous: tail-feathers, except the 2 middle ones, with an oval white spot.

Chimney Swallow. *Br. Zool. t.* 58. *Lewin t.* 124. *Walcot t.* 251.

Length near 7 inches: *extent* above 12: *weight* near 6 drachms. *Bill* black: *iris* hazel: *breast* and *belly* white, in the male with a tinge of red: *tail* much forked: *legs* dusky.

133. *H. urbica.* With 3 toes forwards: rump and underneath white: tail-feathers entirely black.

Houſe Martin. *Lewin t.* 125. *Albin t.* 56. *a.* *Walcot t.* 252.

Length 5 inches and a half: *extent* 10: *weight* about 5 drachms. *Bill* black: *mouth* yellow within: *iris* hazel: *tail* much less forked than in the ſwallow: *legs* covered with short white down: *claws* white.

134. H. *riparia.* With 3 toes forward: mouse-brown, beneath white: a broad mouse-brown band across the throat.

Sand Martin. *Lewin t.* 126. *Albin t.* 56. *b.* *Walcot t.* 253.

Length hardly 5 inches: *extent* about 10 inches. *Bill* dusky: *iris* hazel: *tail* with a slight cinereous edge: *legs* dusky, a little feathered behind.

135. H. *Apus.* With the toes all placed forwards: above and underneath sooty-black: chin whitish.

Swift. *Br. Zool. t.* 58. *Lewin t.* 127. *Walcot t.* 254.

Length near 8 inches: *extent* above 17: *weight* an ounce. *Bill* black: *iris* hazel: *quill* and *tail-feathers* with dusky margins: *legs* very short, clothed to the toes with dusky feathers: *claws* black. *Female* less, and more inclining to brown.

27. CAPRIMULGUS. *Goatsucker.*

136. C. *europæus.* Variegated with black, brown, ferruginous and white; beneath reddish-brown, with numerous dusky transverse lines.

Night Swallow. *Br. Zool. t.* 59. *Lewin t.* 128. *Donovan t.* 67.

Length 10 inches and a half: *extent* 22: *weight* 2 ounces and a half. *Bill* dusky, short, weak: *eyes* large: *iris* hazel: *body* elegantly varied with black, grey, dark brown, ferruginous and white, diſpoſed in ſpots lines and bars: *tail* rounded: *legs* short, ſcaly, feathered below the knees. *Male* with a large white oval ſpot on the inner-web of the 3 first quill-feathers, and at the end of the 2 outer tail-feathers.

ORDER IV. COLUMBÆ.

28. COLUMBA. *Dove, Pigeon.*

137. C. *Œnas.* Pale bluish ash-colour: neck and breast with a green and copper gloss: lower part of the back whitish; wings with 2 black bands: tail tipt with black.

Stock Dove. *Br. Zool. t.* 45. *Lewin t.* 129. *Donovan t.* 107.

Length near 14 inches: *extent* 22: *weight* 11 ounces. *Bill* and *legs* red: *iris* bright yellow: greater *quill-feathers* dusky, with a whitish edge: *breast* inclining to clarety purple: *sides* whitish: *belly* and *vent* pale ash-colour: *tail* dark bluish-grey, with ſometimes a black bar near the middle; the outer-feathers white on the outer-webs near the baſe.

138. C. *Palumbus.* Deep bluish ash: each side the neck a glossy-white patch: angles of the wings and outer quill-feathers edged with white: tail black at the end.

Ring Dove, Quest. *Lewin t.* 130. *Walcot t.* 187.

Length near 18 inches: *extent* 30: *weight* 20 ounces. *Bill* yellowish; *iris* bright yellow: *back* inclining to brown: greater *quills* blackish, the outer-ones white on the outer edges: *ſpurious wings* nearly black, with a white line down to the quills: lower-part of the *belly* and *vent* inclining to white: *tail* dark ash-colour, black on the lower part: *legs* purplish-red, feathered below the knees.

139. C. *Turtur.* Back brownish-ash; breast reddish-white: sides of the neck with a black patch spotted with white: tail tipt with white.

Turtle Dove. *Br. Zool. t.* 45. *Lewin t.* 131. *Walcot. t.* 188.

Length 12 inches: *extent* 21 inches: *weight* 6 ounces.

Bill dusky: *iris* yellow: beneath and behind the *eyes* purplish-red: *head* and *neck* blue-grey: *back* and *wings* reddish-brown, the feathers with paler edges; the fore-part of the latter bluish-grey: *chin* and *belly* whitish: *quills* dusky, with paler margins: *tail* black, the 2 middle-feathers not tipt with white, the outmost white on the outer edge: *legs* purplish-red.

ORDER V. GALLINÆ.

29. PHASIANUS. *Pheasant.*

140. P. *colchicus.* Reddish chesnut spotted with black: head and part of the neck, of the male, blue, with a violet and green-gold gloss: tail wedge-form: cheeks warty.

Pheaſant. *Lewin t.* 132. *Albin t.* 25. 26. *Walcot t.* 178.

Length 3 feet: *breadth* 2 feet 8: *weight* near 3 pounds.

Bill pale horny: *iris* yellow: *cheeks* crimſon ſpeckled with black, granular: *plumage* a rich assemblage of red and black, with a fine gloſs of green gold blue and violet changeable in the various shades of light: feathers of the *tail* very unequal, the 2 middle-ones 18 or 20 inches long: *legs* dusky; toes connected at the baſe; ſpur 3 quarters of an inch long. *Female* brown, with a mixture of grey, reddish and black: sides of the head covered with feathers.

30. TETRAO. *Grous.*

141. T. *Urogallus.* Rufous-brown: head and neck cinereous: chin and belly blackish: axils of the wings white.

Cock of the Woods. *Lewin t.* 133. *Br. Zool. t.* 40. 41. *Donov. t.* 89.

Length 2 feet 8: *extent* 3 feet 10: *weight* 12 or 13 pounds.

Bill horn-colour: *iris* hazel: *cheeks* red: *body* marked with minute tranſverſe black lines: *breast* glossy black-green: *belly* and *vent* marked with white: *tail* black, with a few white ſpots: *legs* covered with brown feathers: edges of the *toes* pectinate.

Female leſs: throat red: head, neck and back, with tawny and red bars: belly with pale orange and black bars: tail dark ferruginous, with black bars, tipt with white.

142. T. *Tetrix.* Glossy blue-black: spot near the shoulders, 2 bars on the wings, and under tail-coverts white: tail forked. *Fem.* larger, with reddish spots on the neck, breast, wings and thighs.

Black Grous. *Brit. Zool. t.* 42. *Lewin t.* 134. *Donov. t.* 97.

Length 1 foot 10: *extent* 2 feet 9: *weight* near 4 pounds.

Bill dusky: *iris* hazel: *coverts* dusky-brown: 4 first *quill-feathers* black, the next white at the bottom; lower half of the ſecondaries and under-coverts white: *thighs* and *legs* clothed with dusky feathers, with a few white ſpots on the former: *tail* much forked, the outer feathers bending outwards; the under-coverts pure white.

Female much less, tranſverſely variegated with ferruginous black and grey: tail-feathers straight and even at the end.

143. T. *Lagopus.* Varied with grey and white: legs woolly: wings white, with black shafts: 2 middle tail-feathers white, the rest black more or less tipt with white.

Ptarmigan. *Br. Zool. t.* 43. *Lewin t.* 135. *Donovan t.* 12.

Length 15 inches: *extent* 23: *weight* 19 ounces.

Bill black: *iris* hazel: *plumage* pale brown or ash-colour, crossed with ſmall dusky ſpots and bars: *head* and *neck* with broad bars of black, ferruginous, and white: *belly* white: *wings* white, the shafts of the greater quills black: *tail-coverts* white, reaching to the end of the tail, and concealing it when cloſed: *legs* and *toes* covered with white down. In winter the plumage changes to pure white, except the shafts of the wings and tail, and a black ſpot in the male between the bill and the eye.

144. T. *scoticus*. Tawny-red, with transverse black lines and spots: 6 outer tail-feathers each side entirely blackish: over the eyes a naked scarlet fringed membrane.

Red Grous. *Br. Zool. t.* 43. *Lewin t.* 136. *Walcot t.* 183.

Length 16 inches: *extent* 26 inches: *weight* near 20 ounces.

Bill black: *iris* hazel: *nostrils* covered with black and ferruginous feathers; at the baſe of the lower mandible a white ſpot: *head* and *neck* pale tawny, with black lines: *back* and *ſcapulars* deeper tawny: *breast* and *belly* dull purplish-blown, crossed with minute dusky lines: 4 middle *tail-feathers* with black and red bars: *legs* clothed below the knees with white down.

31. PERDIX. *Partridge.*

145. P. *cinerea*. Cinereous, with black, rufous, and white lines: behind the eyes a naked red skin: on the breast a deep chesnut patch: outer tail-feathers bright chesnut.

Common Partridge. *Lewin t.* 137. *Albin t.* 27. *Walcot. t.* 184.

Length 13 inches: *extent* 20: *weight* nearly 15 ounces.

Bill brown: *iris* hazel: *head* reddish-brown: *plumage* grey, crossed with black and bay lines; the feathers of the back and wing-coverts with a white line down the middle: *breast* with a horſe-shoe-like cheſnut mark: greater *quills* dusky, with reddish spots on each web: 6 outmost *tail-feathers* each side ferruginous tipt with white, the rest like the back: *legs* of the male with a blunt ſpur. *Female*, head duller: cheeks greyish: ſpot on the breast white the first year, dull chesnut the ſecond, obſolete the third.

146. P. *rufa*. Legs and bill red: through the eyes a white stripe: throat white, with a black collar spotted with white.

Red-legged Partridge, *Lewin t.* 138. *Albin t.* 29.

Not uncommon in *Norfolk* and *Suffolk*, and rather larger than the last. *Bill* and *iris* red: *front* greyish: *head* and *breast* reddish: *chin* white; sides and lower part of the *neck* ſpotted with black: *back*, *wings* and *rump* grey-brown: *sides* with creſcent-like ſtripes of black white and orange: *quill-feathers* edged with dull yellow: 6 outer *tail-feathers* rufous, the middle-ones grey-brown: *vent* pale rufous: *legs*, of the male, with a blunt ſpur.

147. P. *Coturnix*. Variegated grey, yellow, brown and white; beneath pale reddish-white: down the crown and over the eyes a yellowish white streak: tail-feathers with a rufous margin and crescent.

Quail. *Lewin t.* 139. *Albin t.* 30. *Walcot. t.* 185.

Length 7 inches and a half: *extent* 14: *weight*

Bill dusky: *iris* hazel, becoming yellow: *head* ferruginous ſpotted with black, the crown divided by a yellow-white line: *chin* and *throat* dirty-white, with a black mark extending to the ears: *cheeks* spotted brown and white: *breast* pale yellow-red, with a few black lines: *belly* and *vent* paler: *quills* dusky, with yellowish-white marks: *tail* dusky, more or less tipt with white: *legs* yellowish, without ſpur in the male.

32. OTIS. *Bustard.*

148. O. *Tarda.* With undulate dusky and rufous streaks, beneath whitish: male with a crest-like tuft each side the lower mandible.

Great Bustard. *Br. Zool. t.* 44. *Lewin t.* 140. *Walcot. t.* 173.

Length near 4 feet: *extent* 9: *weight* 24-28 pounds.

Bill dusky: *iris* light hazel: *head* and *neck* cinereous; lower-part of the neck and *throat* ferruginous: greater *wing-coverts* grey: *quills* black, slightly tipt with white: middle *tail-feathers* ferruginous with black bars, outer-ones whitish with black bars: *legs* dusky.

Female half the size of the male: crown orange with black lines: lower-part of the neck before grey: lower mandible without the tufts of feathers.

149. O. *Tetrax.* Ferruginous mottled with brown and crossed with dusky lines, beneath white: lower mandible of the male without the crest-like tuft.

Little Bustard. *Lewin t.* 141. *Edw. t.* 251. *Walcot t.* 174.

Length 17 inches: about the size of the pheasant.

Bill pale brown: *crown* and *chin* ſpotted ferruginous and black: sides of the *head* rufous-white: *neck*, in the male, black bounded above and below with white: greater *quills* black with a white baſe; ſecondaries white: 4 middle *tail-feathers* tawny with black bars; the rest white more or less barred with black: *legs* grey.

Female with the neck like the back.

150. O. *Œdicnemus.* Pale reddish-brown, with dusky spots: chin, belly, and vent, white with a few dusky streaks: 2 primary quill-feathers black, with a white bar in the middle.

Thick-kneed Bustard. *Lewin t.* 142. *Albin t.* 69. *Walcot t.* 163.

Length 18 inches: *extent* 36: *weight* 18 ounces.

Bill yellowish at the baſe, dusky at the tip: *iris* yellow: *head* much rounded: beneath the *eyes* a bare yellowish-green ſpace, with a pale streak above and beneath them: *wing-coverts* with a whitish band: *tail-feathers* tipt with black, except the 2 middle-ones; the 3 outer barred with black and white, the rest with brown: *legs* yellow; the knees thick, as if ſwoollen: *claws* dusky.

ORDER VI. GRALLÆ.

33. PLATALEA. *Spoonbill.*

151. Pl. *Leucorodia.* White, with a bright orange spot at the angles of the bill: hind-head crested.

White Spoonbill. *Br. Zool. app. t.* 9. *Lewin t.* 143.

Length 40 inches: *extent* 52: *weight* 3 pounds and a half.

Bill 7 inches long, 2 inches wide in the broadest part, brown or black, with an orange ſpot near the tip of the upper mandible, rough towards the baſe: *tongue* short, heart-shaped: *iris* grey, or red: *orbits* nearly bare, black: *chin* ſometimes black: *plumage* white, with sometimes the tips of the quills black: *legs* 6 inches long, black, naked half way up the thighs.

34. ARDEA. *Heron.*

152. A. *Grus.* Body cinereous: hind-head bare of fea-

thers, warty: crown, forepart of the neck and quills black: from the pinion of the wings a tuft of loose lacerated curled feathers.

Crane. *Br. Zool. app. t.* 6. *Lewin. t.* 144. *Walcot t.* 124.

Length 5 feet or more: *weight* about 10 pounds.

Bill 4 inches long, olive-green: *front* covered with black down or bristles: back of the *head* bald, red, beneath this a grey ſpot; sides of the head and back of the neck whitish: *tail* grey, tipt with black, nearly covered with the looſe feathers from the pinions of the wings: *legs* black.

153. A. *Ciconia.* White, with bald blackish orbits: quill-feathers and greater coverts black: bill, legs, and skin red.

White Stork. *Lewin t.* 145. *Albin t.* 64. *Walcot t.* 125.

Length 3 feet 3 inches: size of the Turkey.

Bill 7 inches and a half long: some of the *ſcapulars* black.

154. A. *Nycticorax.* Hind-head with a crest of 3 white feathers dusky at the ends: crown and back greenish-black: wings and tail pale ash-colour. *Fem.* head without crest, brown: back brown: over the eye a whitish streak: primary quill-feathers with a white spot at the tip.

Night Heron. *Lewin t.* 146. *Albin t.* 49. *Walcot t.* 126.

Length 20 inches. *Bill* 3 inches 3 quarters long, black with a yellowish baſe: *iris* orange: *lores* and *orbits* yellow-green: *front* with a white band: *neck* and under parts whitish: *legs* yellowish-green: *middle-claw* ſerrate on the inner edge. *Female,* with yellowish streaks on the fore-part of the neck: wings grey-brown, with yellowish-white streaks; some of the coverts and quill-feathers tipt with white.

155. A. *stellaris.* Hind-head hardly crested: above pale yellow brick-colour with transverse black spots, beneath paler with oblong ones.

Bittern. *Lewin t.* 147. *Albin* 1. *t.* 68, *Walcot. t.* 127.

Length 2 feet and a half: *weight* 22 ounces.

Bill 4 inches long, horn-colour inclining to green at the baſe: *iris* yellow: *crown* and ſpot at the corners of the mouth black: *feathers* on the hind-head, neck and breast, long and looſe: *legs* pale green: inner-edge of the *middle-claw* ſerrate.

156. A. *minuta.* Head without crest: crown, back, quills and tail greenish-black: neck, breast, and wing-coverts buff-colour. *Fem.* above brown, the feathers with pale rufous margins; beneath paler: crown, back, quills and tail black.

Little Bittern. *Br. Zool. app. t.* 8. *Lewin t.* 148. *Donovan t.* 54.

Length from the tip of the bill to the end of the toe 30 inches.

Bill 2 inches and a half long, greenish-yellow: *belly* and *vent* white: hind part of the *neck* bare: *shoulders* with a large bay ſpot: larger *wing-coverts* whitish, lesser yellow-buff: *thighs* feathered to the knees; *legs* dusky-green: *middle claw* ſerrate on the inner side.

Female. front ſurrounded by a bay line.

157. A. *comata. b.* Head without crest: body white; upper-part of the head, hind-part of the neck, breast, and back inclining to rufous.

Squacco Heron. *Linn. Trans.* iii. *p.* 335. *Pl. enl.* 910.

Length 21 inches. *Bill* yellow, between which and the eyes bare and grey : *breaſt* with ſome long feathers hanging over it inclining to rufous : *wing-coverts* with a rufous tinge : *legs* yellow.

158. A. *cinerea*. Hind-head with a black pendent crest: body cinereous : neck with a black line underneath : breast with a black band. *Fem.* hind-head smooth, black : back bluish, beneath whitish : breast with oblong black spots.

Common Heron. *Br. Zool. t.* 61. *F. Lewin t.* 149. *M.*

Length 3 feet 2 : *extent* 5 feet 4 : *weight* 3 pounds and a half.

Bill near 6 inches long, dusky above, yellowish beneath : *iris* yellow, round the *eyes* a bare greenish skin : *front* and *crown* white: *neck* white on the upper-part, the fore part with a double row of black ſpots : *back* clothed with down, covered with the ſcapulars, which are grey and white, and like the feathers on the lower-part of the neck are narrow long and looſe : *wings* with a white ridge, the coverts bluish-grey, the primary quills and bastard wings black : *sides* black : *breast* and *belly* white : *tail* bluish-grey : *thighs* dirty white : *legs* dirty-green : *middle-claw* ſerrate inwardly.

Female, head bluish-grey.

159. A. *Gardeni*. Above dusky with white spots, beneath whitish with longitudinal dusky lines : greater quills edged and tipt with white : tail dusky.

Gardenian Heron. *Linn. Trans. v. p*, 276. *Pl. enlum.* 939.

Length about 20 inches : size of the Rook.

Bill dusky, green-yellow beneath : *lores* greenish : *back* without ſpots on the lower part : *lesser-coverts* with yellowish ſpots, greater ones with a white ſpot at the tip, forming 2 bands on the wings : *legs* dirty yellow : *middle-claw* ſerrate inwardly.

160. A. *Garzetta*. Hind-head crested : body white : bill greenish black : lores and legs olive-green.

Little Egret. *Br. Zool. app. t.* 7. *Lewin t.* 150. *Donov. t.* 98.

Length to the end of the legs 32 inches : *weight* a pound.

Bill slender : *iris* yellow : *plumage* ſplendid white : *crest* consisting of ſeveral short and 2 long pendent feathers : feathers of the *breast* and *ſcapulars* long, looſe, pendent, lacerated, reaching beyond and covering the tail : *claws* dusky, the middle-one ſerrate inwards.

161. A. *alba*. Head without crest : body white : bill greenish-yellow : lores green : legs black.

White Heron. *Br. Zool. t.* 62. *Lewin t.* 151.

Length 53 inches : *extent* 60 inches : *weight* 40 ounces.

Bill nearly 6 inches long : *iris* and edges of the eyelids yellow : *middle-claw* ſerrate on the inner-edge.

162. A. *caspica*. Hind-head somewhat crested, black : body grey : chin white : neck breast and belly ferruginous, the former with three black lines runniug down it.

African Heron. *Lewin t*, 152. *Walcot. t.* 131.

Length about 3 feet : smaller than the common Heron.

Bill 7 inches long, dusky yellow with a blackish point : *head* and greater part of the *neck* pale ferruginous : *crest* of black long feathers : *feathers* of the breast and rump long, looſe, mixed grey and ferruginous : *back* and *wings* deep grey : *quills* and *tail* black : *belly* pale grey-ferruginous : *legs* dull yellow, the fore-part and claws black : *middle-claw* ſerrate on the inner-edge.

35. TANTALUS. *Ibis*.

163. T. *igneus*. Head and neck black, the feathers fringed with white : orbits white : body glossed and variegated with blackish, blue, green and claret-red.

Glossy Ibis. *Lewin t.* 153. *Donovan t.* 118. *Walcot t.* 132.

Length 2 feet. *Bill* 5 inches long, roundish, curved, greenish-blue : *iris* olive : *eyelids* brown : beneath the chin a looſe bald dilatable skin : *quill* and *tail* green-gold with a red and violet gloss : *legs* long, bright green : *claws* black, hooked.

164. T. *Falcinellus.* Face black; head and neck pale ferruginous : chin with transverse white lines : body dark chesnut mixed with green above, beneath paler : wings and tail dusky.

Bay Ibis. *Sowerby Brit. miscel. p.* 35. *tab.* 17.

Length 2 feet 6 : *extent* 3 feet 2 : *weight* 18 ounces.

Bill 5 inches long, horn-colour, dusky towards the baſe : *iris* dusky : *face* naked : *plumage* dusky-cheſnut, with a green and purple gloss, beneath duller : *legs* bluish horn-colour : *middle-claw* pectinate on the inner-edge.

36. NUMENIUS. *Curlew.*

165. N. *Arquata.* Greyish-white with black streaks : wings blackish with snowy spots : legs bluish-grey.

Curlew. *Br. Zool. t.* 63. *Lewin t.* 154. *Walcot t.* 133.

Length 2 feet : *extent* 3 feet 3 : *weight* 25-30 ounces.

Bill dusky, 4 inches and a half long : *iris* hazel : *head, neck, scapulars* and *wing-coverts* brown-grey, the feathers black in the middle : *chin, rump, belly* and *vent* white, with dusky ſpots : *tail* reddish-white, with dusky bars : *legs* bluish : *toes* flat and broad.

166. N. *Phæopus.* Greyish-white with dusky spots, those on the back and wing-coverts rhomboidal : quill-feathers dusky, the borders of the inner-webs barred with white : legs dusky-blue.

Whimbrel. *Br. Zool. t.* 64. *Lewin t.* 155. *Donovan t.* 72.

Length 18 inches : *weight* about 13 or 14 ounces.

Very much reſembles the last, except in size ; and the ſpots on the back and wings are larger and of a more rhombic form, and the quill-feathers are dusky and ſpotted with white on their inner-webs only.

167. N. *Guarauna.* Head and neck brown with whitish spots : back and belly chesnut-brown : wing-coverts rump and tail bright brown, with a green gloss.

Brasilian Whimbrel. *Will. Ornith. p.* 292. *t.* 53.

Shot a year or two since in Angleſea. *Dillwyn.*

Body 21 inches long. *Bill* 4 inches long, arched, brown with a yellowish baſe : feathers of the *head* and *neck* brown with a whitish margin : *ſcapulars, rump,* upper and under *tail-coverts* and *tail* bright brown with a green gloss : *wing-coverts* the ſame, the greater-ones brown within : *quills* brown, the outer-ones with a green gloſs : *legs* grey-brown : *claws* blackish.

168. N. *pigmæus.* Above variegated with brown, ferruginous and white ; beneath and vent white : quills and outer tail-feathers edged with white.

Pigmy Curlew. *Lewin t.* 156. *Walcot t.* 134.

Length 8 inches and a half : *extent* 15 and a half : *weight* near 2 oz.

Bill black, an inch and a half long : primary *quill-feathers* dusky, edged with white : *tail* dusky, the outer-feathers edged with white : *legs* black.

37. SCOLOPAX. *Snipe.*

169. Sc. *rusticola.* Variegated with ferruginous black and

grey, beneath reddish-grey with dusky bars: lores black: thighs feathered nearly to the knees.

Woodcock. *Br. Zool. t.* 65. *Lewin t.* 157. *Walcot. t.* 136.

Length 14 inches: *extent* 26: *weight* about 13 ounces.

Bill 3 inches and a half long, dusky towards the tip, furrowed along the side of the upper-mandible: *iris* hazel: *front* and *chin* grey: from the bill to the *eyes* a black stripe: *tail* short, dusky, the outer-webs ſerrate with rufous, the tips grey: *legs* pale brown.

170. Sc. *major.* Above testaceous variegated with black and grey, beneath dirty-white spotted with black: crown with a testaceous stripe down the middle, and a black one each side of it.

Great Snipe. *Lewin t.* 158. *Walcot t.* 137.

Weight 8 ounces. *Bill* black, yellowish at the baſe: above and beneath the *eyes* a testaceous streak: *head* and *neck* ſpotted with black: *back, ſcapulars* and *coverts* varied with testaceous black and grey: *breast* and *belly* with heart-shaped ſpots: *sides* undulate with black: *tail* ferruginous, barred with black: *legs* blackish.

171. Sc. *Gallinago.* Bill tubercled: body variegated with blackish and fulvous, beneath white: front with 4 brown lines.

Common Snipe. *Br. Zool. t.* 68. *Lewin t.* 159. *Walcot t.* 138.

Length a foot: *extent* 18 inches: *weight* about 4 ounces.

Bill 3 inches long, dusky, flattish and rough at the end; *head* with 4 brown lines, between which are 3 ferruginous ones: *lores* dusky: *throat* white: *neck* and *breast* ſpotted with black: *belly* and *vent* white: *quills* black, the first edged with white: *back* black, with tawny bars and pale buff lines: *tail-feathers* black at the baſe: *legs* lead-colour or brown.

172. Sc. *Gallinula.* Bill tubercled: above variegated, with a green and purple gloss: from the shoulders to the tail 2 deep buff stripes: lores brown: legs greenish.

Jack Snipe. *Br. Zool. t.* 68. *Lewin t.* 160. *Walcot t.* 139.

Length 8 inches and a half: *extent* 15: *weight* about 8 ounces.

Bill lead-colour, black at the end: *iris* dusky: *crown* black, with a yellowish border: over the *eyes* a yellowish streak: *neck* varied with whitish, brown, and pale red: *rump* glossy bluish-purple: *wing-coverts* bordered with grey and brown: *belly* and *vent* white: *tail-feathers* pointed, brown with tawny borders.

173. Sc. *lapponica.* Bill a little bending upwards, yellowish: head, neck and breast reddish-ferruginous: outer tail-feathers half white: legs blackish.

Red Godwit. *Br. Zool. t.* 67. *Lewin. t.* 161. *Walcot t.* 140.

Length 18 inches: *weight* about 12 ounces.

Bill dusky at the point: *iris* hazel: *body* dusky above with ferruginous ſpots: *head* bright ferruginous with dusky lines: *breast* and *sides* with blackish tranſverſe lines; *quills* blackish, tipt with white: *belly* and *vent* white, with dusky and pale ferruginous marks: *tail-feathers*, except the 2 middle-ones, partly black partly white.

174. Sc. *ægocephala.* Bill very slightly bending upwards; body grey, more or less tinged with pale ferruginous, with dusky spots: belly and vent white: tail with dusky bars.

Common Godwit. *Lewin t.* 162. *Donovan t.* 75. *Walcot t.* 141.

Length about 16 inches; *weight* 12 ounces or more.

Bill dusky at the point: *iris* hazel: from the bill to the eye a broad white stripe: *chin* white, ſometimes ſpotted: *neck*, *breast*, and *back*, with or without a ferruginous tinge: *quill-feathers* dusky, more or leſs tipt or edged with white: *tail-coverts* mostly white: *legs* dusky or bluish.

175. Sc. *limosa*. Bill slightly bending upwards: body grey-brown with a mixture of ferruginous: belly, vent, and rump white: quills white at the base, except the 4 first: tail white at the base.

Jadreka Snipe. *Lewin t.* 163. *Buffon* 7. *p.* 500. *t.* 27.

Length 17 inches: *extent* 28 inches: *weight* 9 ounces.

Bill yellowish at the baſe, and ſurrounded with reddish feathers: *iris* whitish: *cheeks* reddish: over the *eyes* a white line: *back* brown: first 3 *quill-feathers* with a white shaft: *wings* with a white line: 2 middle *tail-feathers* black, the rest more and more white: *legs* dusky.

176. Sc. *Glottis*. Grey-brown with blackish spots: eyebrows, lower part of the back, and under parts white: tail white with dusky bars: legs dusky-green.

Greenshank. *Lewin t.* 164. *Walcot. t.* 142. *Will. t.* 55.

Length 14 inches: *extent* 28 inches: *weight* about 6 ounces.

Bill dusky, slender, the upper-mandible curved a little downwards at the tip, the lower upwards: *head* and *neck* with dusky lines: over the *eyes* a white line: *wing-coverts*, *ſcapulars*, and ſome of the inner *quills* with a gloss of green: *quills* dusky, with white ſpots on the inner-webs: *legs* long, slender.

177. Sc. *Totanus*. Blackish with white spots: breast white with fine black lines: belly and vent white: lateral tail-feathers whitish with blackish bars: legs red.

Spotted Snipe. *Lewin t.* 165. *Albin* ii. *t.* 71.

Size of the last. *Bill* reddish at the base: *iris* reddish: *head* pale ash with black streaks: *back* dusky, with triangular white ſpots: *wing-coverts* ash-colour, with triangular white ſpots: *quills* dusky: middle *tail-feathers* grey.

178. Sc. *canescens*. Variegated with cinereous and white: throat and breast whitish, the latter with cinereous spots: tail with cinereous bars.

Cinereous Godwit. *Pennant Brit. Zool.* ii. *n.* 180. *t.* 66.

Size of S. Glottis, but the *bill* is black and much thicker, and the *legs* ash-colour.

179. Sc. *Cantabrigensis*. Grey-brown, beneath white: wing-coverts and tail-feathers with blackish bars: legs orange-red.

Cambridge Godwit. *Penn. Brit. Zool.* ii. *p.* 447. *n.* 185.

Larger than S. Calidris. Lesser *wing-coverts* brown, edged with dirty white, and barred with black; primaries dusky, whitish on their inner sides; ſecondaries barred with dusky and white: under side of the *neck* and *breast* dirty white: *belly* and *vent* white: *tail* with cinereous and black bars.

180. Sc. *Calidris*. Variegated white brown and grey: bill red: legs orange-red: over the eyes a white line: secondary quill-feathers tipt with white.

Redshank. *Brit. Zool. t.* 65. *Lewin t.* 166. *Donov. t.* 112.

Length 12 inches: *extent* 22: *weight* 5 ounces and a half.

Bill with a black tip: *iris* hazel: *head* and *neck* grey-brown with dusky ſpots: *back* and *ſcapulars* greenish-brown with dusky ſpots: *quills* dusky, ſome of them tipt with white: *lores* dusky: *chin* and *neck* dirty white with dusky streaks: *belly*, *vent* and *rump* white with dark ſpots: *tail* with black bars.

181. Sc. *grisea*. Grey-brown clouded with black: wings brown: back dark brown edged with grey and rufous-brown: belly white: rump and tail barred with black and white.

Brown Snipe. *Montague Ornith. Dict.*

Length 11 inches: *weight* 3 ounces and a quarter.

Bill dusky, lighter at the baſe, rough near the tip: *iris* dusky: *lores* dusky, with a white line over them: greater *quills* dusky, inner-ones slightly tipt with white: sides of the *vent* and under *tail-coverts* rufous-white with dusky bars: *legs* yellowish-green.

38. TRINGA. *Sandpiper.*

182. T. *pugnax*. Bill and legs yellow-buff: face covered with yellow pimples: wing-coverts grey-brown: middle tail-feathers barred with black, the 3 outer-ones plain grey brown.

Ruff and Reeve. *Br. Zool. t.* 69. *Lewin t.* 167. *Donovan t.* 33.

Length about a foot: *extent* of wings nearly 2.

Bill ſometimes black: *iris* hazel: general *plumage* very variable, but commonly brown with black and white marks, and the under parts more or less white. The *Male* in the ſecond year is adorned with a ſpreading ruff of feathers on the neck, which falls off in moulting time. *Female* pale brown, ſpotted with black on the back: tail brown, the middle-feathers ſpotted with black.

183. T. *Vanellus*. Crown glossy-black with a long pendent crest: back and wings glossy-green: breast black: legs orange.

Lapwing, Pewit. *Lewin t.* 168. *Donov. t.* 25. *Walcot. t.* 146.

Length 13 inches: *extent* 30 inches: *weight* about 8 ounces.

Bill black: *iris* hazel: *head* with a green gloss: *crest* of unequal feathers, a little turning up at the end; sides of the *head* and *neck* white: over the *eyes* a whitish streak, and a black one beneath them: lower-part of the *neck* before, and *breast* black; the hind-part brown mixed with white: *belly* white: *vent* and *tail-coverts* pale rufous: *back* and *wing-coverts* dull green with a purple and blue gloss: *quills* black, the 4 first tipt with white; ſecondaries white on the upper half: *tail* black on the lower half tipt with white, the outer feathers nearly all white.

184. T. *Gambetta*. Bill reddish, a little curved upwards: body variegated dusky-grey and pale buff, beneath whitish with a few dusky streaks: legs yellow.

Gambet. *Br. Zool. t.* 70. *Lewin t.* 169. *Albin* ii. *t.* 68.

Size of S. Glottis. *Bill* black at the point: *iris* yellowish: *head*, *back* and *breast* grey-brown with dull yellow ſpots: *coverts* and *ſcapulars* grey, edged with dirty yellow: *wings* longer than the tail, the first feathers dusky bordered with yellow.

185. T. *Squatarola*. Bill black: body grey with dusky spots, beneath white: tail barred black and white: legs dull green.

Grey Sandpiper. *Lewin t.* 170. *Walcot. t.* 146.

Length 12 inches: *extent* 24 inches: *weight* 7 ounces.

Feathers of the *head*, *back* and *coverts* dusky edged with greenish-ash, and some with white: *cheeks* and *throat* white with a few dusky streaks: *quills* black, the inner-webs more or less white: *rump* white: *back-toe* very small.

186. T. *nigricans.* Base of the bill and legs red: head and neck dusky black: back and scapulars purple black, with cinereous edges; chin and middle of the belly white.

Purple Sandpiper. *Transact. Linn. Soc.* 4. *p.* 40. *tab.* 2.

2. Bill yellow at the baſe. *Linn. Tranſ.* 4. *p.* 22. *t.* 1.

Length 8 inches and a half: *extent* above 15: *weight* 2 oz. & a half.

Bill black at the point: *eyelids* whitish: *back* and shoulders with a purplish tinge: *wing-coverts* black tipt with white: primary *quills* dusky with white shafts and edges; ſecondaries paler with white tips, inner-most nearly white: *chin* whitish: *neck* and *breast* dusky with white lines: *sides* with dusky ſpots: middle *tail-feathers* black, the outer-ones dark grey.

187. T. *ochropus.* Bill dotted at the point: back and scapulars brown with a green gloss, with roundish white spots: chin, belly, and outmost tail-feathers white: legs dull green.

Green Sandpiper. *Lewin t.* 171. *Linn. Trans.* i. *p.* 130. *t.* 2.

Length full 16 inches: *extent* 18: *weight* 3 oz. and a quarter.

Bill dusky: *iris* hazel: *crown* and *nape* dusky-grey: *face* dusky: over the *eyes* a dirty white streak: *neck* and *breast* with dusky streaks: *sides* dusky with angular white lines: *wing-coverts* brown with a green gloss: *quills* dusky: *tail-feathers*, except the outer-ones, barred with black: the coverts white.

188. T. *Glareola.* Bill smooth: above dusky with whiteish spots, beneath white: neck cinereous.

Wood Sandpiper. *Arct. Zool.* ii. *p.* 482. *G.*

Length 9 inches: *weight* 2 ounces and a quarter.

Bill dull green at the baſe, black towards the point: *iris* dusky: from the bill to the *eyes* a dusky streak, over which is a white-one: *ears* dusky: *neck* dusky with grey lines: *chin* and *throat* white: *quills* black, some of them tipt with white: *tail* barred black and whitish: *legs* long, olive-green.

189. T. *grenovicensis.* Variegated with dusky, grey, and pale ferruginous: neck pale grey beneath: belly, vent, and sides of the rump white.

Greenwich Sandpiper. *Lewin t.* 181. *Walcot. t.* 154.

Length 12 inches and a half: *weight* nearly 8 ounces.

Bill black: *crown* reddish-brown with black streaks: *cheeks* and *neck* pale grey with dusky shafts: feathers of the *back*, *shoulders*, and *coverts* dusky with pale ferruginous margins: *quills* dusky, the shafts more or leſs white: *tail* brownish-grey, clouded and tipt with pale ferruginous: *legs* dusky-green.

190. T. *cinerea.* Grey, with white and dusky crescent-like spots: throat and belly white: rump white with undulate black bars: tail-feathers edged with white.

Ash-coloured Sandpiper. *Lewin t.* 172. *Walcot t.* 147.

Length 10 inches: *extent* 20 inches: *weight* 5 ounces.

Bill black: *head* and *neck* ash-colour ſpotted with black: *back* and *shoulders* grey, with dirty-white curved marks: *outer-quills* dusky, more or less edged with white: *breast* and *sides* white ſpotted with black: *legs* dusky-green: *toes* edged with a narrow finely ſcalloped membrane.

191. T. *maritima.* Variegated dusky ash-colour and grey, beneath white; throat and tail dusky: feathers of the breast fringed with white: 4 lateral tail-feathers edged with white.

Sea Sandpiper. *Transact. Linn. Soc.* iv. *p.* 22. *t.* 1.

Length near 9 inches: *extent* near 16: *weight* 2 oz. and a half.

Bill yellow at the baſe, black towards the point: primary *quills* dusky, with white shafts; ſecondary lighter, with white tips; hinder-ones nearly white: 4 middle *tail-feathers* dusky and longer than the rest: *sides, thighs* and *vent,* with a few dusky ſpots: *legs* yellow.

192. T. *fusca.* Pale brown spotted with black, beneath white: neck with black streaks underneath: wing-coverts dusky edged with dirty white: tail cinereous.

Brown Sandpiper. *Br. Zool.* ii. *p.* 463. *n.* 195.

Size of the Jack Snipe. *Bill* and *legs* black.

193. T. *lincolniensis.* White, with grey and dusky spots above, and oblong brown and black spots beneath: 2 middle tail-feathers entirely black.

Black Sandpiper. *Br. Zool.* ii. *p.* 464. *n.* 197.

Size of a Thrush. *Bill* short, dusky and obtuſe at the point: *nostrils* black: *iris* yellow: *head* small, flattened at top: *wings* long; quills black, crossed with a white line near the baſe: *tail* short, entirely white, except the 2 middle feathers: *legs* reddish-brown.

194. T. *Hypoleucos.* Bill smooth: above grey with a greenish gloss and dusky transverse lines, beneath white: over the eyes a whitish stripe: legs dark grey.

Common Sandpiper. *Br. Zool. t.* 71. *Lewin t.* 173. *Walc. t.* 148.

Length 7 inches and a half: *extent* 13: *weight* 2 ounces.

Bill brown: *iris* hazel: *back* and *scapulars* with a greenish-gloss: *wings* greenish brown, crossed with narrow dusky undulate lines: *quills* dusky, with a white ſpot on the inner-web, except the outmost: *tail* with a greenish gloſs, the 4 middle feathers crossed with dusky bars, the 2 next tipt with white, the rest ſpotted or barred with white: *legs* dull green.

195. T. *macularia.* Base of the bill and legs reddish: body spotted above and beneath: over the eyes a white stripe: wings with 2 white bars.

Spotted Sandpiper. *Lewin t.* 174. *Walcot t.* 149.

Length near 8 inches: *breadth* 14. Size of a Thrush.

Bill dusky towards the point: *body* above greenish-brown with triangular dusky spots, becoming larger and more rounded downwards, plain on the rump; beneath white with roundish dusky ſpots: 2 middle *tail-feathers* greenish-brown, the rest white with dusky bars. *Female* without ſpots on the belly.

196. T. *Cinclus.* Bill and legs black: lores white: body and rump mixed grey and brown: tail-feathers with light edges.

Purre. *Br. Zool. t.* 71. *Lewin t.* 175. *Donov. t.* 32.

Length 7 inches: *extent* 13: *weight* an ounce and 3 quarters.

Iris dusky: *body* above dark grey, with dusky ſtreaks: greater *coverts* tipt with white; first *quills* dark brown, ſecondaries with a white ſpot in the middle and tipt with white: fore-part of the *neck* mixed with brown; *breaſt* and *belly* white. *Female* larger, and the plumage lighter.

197. T. *alpina.* Bill and legs dusky-ferruginous with dusky spots: breast and belly with blackish blotches: tail-feathers grey edged with white.

Dunlin. *Lewin t*, 177. *Walcot. t.* 151.

Length 8 inches : *extent* 15 : *weight* an ounce and a half.

Iris dusky : *head* and *nape* with dusky ſtreaks : *lores* brown, with a white stripe over them : *quills* blackish, the inner-ones more or leſs whitish on the inner-webs : *vent* with a few dusky streaks : 2 middle *tail-feathers* dusky edged with white.

198. T. *pusilla*. Bill and legs dusky : brown with blackish spots, beneath dirty white : quills dusky tipt with white : outmost tail-feathers with a white shaft : rump variegated.

Little Sandpiper. *Penn. Gen. of birds. t.* 12. *Lewin t.* 176.

Length barely 6 inches : *extent* 12 : *weight* 6 drachms.

Bill black at the point : *plumage* of the upper-parts brown, edged with blackish and pale rufous : greater *coverts* dusky tipt with white : *breast* and *belly* dirty white : *tail* dusky with paler edges : *legs* blackish.

199. T. *flavipes*. Base of the bill and legs yellow : above grey-brown with dusky spots, beneath and rump white : beneath the spurious wings a white patch.

Yellow-legged Sandpiper. *Montague ornith. Dict. append.*

Length 11 inches and a half. *Bill* black towards the point : *iris* light yellow : *head* and *neck* cinereous with dusky streaks : primary *quills* dusky, the first with a white shaft ; secondaries white on the lower half ; *tail* grey brown, the under-coverts with dusky specks : *legs* orange-yellow.

200. T. *islandica*. Bill and legs brown : above brown with dusky and grey variations, beneath ferruginous : secondary wing-coverts edged with white.

Red Sandpiper. *Lewin t.* 178. *Br. Zool. t.* 72.

2. Breast reddish-brown, mixed with dusky : belly and vent white. *Aberdeen Sandpiper. Brit. Zaol. n.* 203.

Length 10 inches. *Bill* a little bent at the point : *crown* ſpotted black and ferruginous : lesser *wing-coverts* cinereous : *quills* dusky, the ſecondaries tipt with white : *breast* and *belly* with a few blackish ſpots : 2 middle *tail-feathers* dusky, the rest cinereous.

201. T. *Canutus*. Above grey with dusky-grey spots, beneath white with dark spots : rump white with dusky crescents : primary quill-feathers serrate : outmost tail-feather whitish, immaculate.

Knot. *Lewin t.* 197. *Flor. Scot.* 1. *p.* 34. *t.* 3, *Edw. t.* 276.

Length 9 inches : *extent* 20 : *weight* 4 oz. and a half.

Bill smooth, dusky-grey ; *iris* hazel : *lores* dusky : *head* and *neck* grey with obſcure dusky lines : *wings* with a white bar, the greater quills with white shafts : *tail* ash-colour, the outmost feathers whitish : *legs* bluish-grey.

202. T. *Interpres*. Legs red : body variegated black, white, and ferruginous : fore-part of the neck black : chin, breast and belly white.

Turnstone, Sea Dottrel. *Lewin t.* 180. *Walcot t.* 152. *Fl. Scot. t.* 3.

2. Body grey : breast black ; tail blackish, white at the baſe. *Br. Zool. n.* 199. *Walc. t.* 152.

Length 9 inches : *extent* 16 inches : *weight* about 4 ounces.

Bill black, a little turned upwards : *iris* hazel : *front* white ; *head* mostly with brown ſpots : upper-part of the *neck* white ; *cheeks* and *lores* black : over the *eyes* a white stripe : *breast* crossed on the upper part by a broad black band : *quills* dusky, the ſecondaries tipt with white : upper *tail-coverts* white with a black band : *tail* black, tipt with white except the 2 middle-feathers : *legs* orange.

39. CHARADRIUS. *Plover.*

203. Ch. *pluvialis*. Blackish with yellowish-green spots: front, belly and vent white: legs blackish.

Golden Plover. *Brit. Zool. t.* 72. *Lewin t.* 182. *Walc. t.* 158.

Length above 10 inches: *extent* 24 inches: *weight* 9 ounces.

Bill dusky: *iris* dull red: *orbits* and *chin* whitish: *quills* dusky, slightly edged with grey at the ends: *belly* sometimes black, or mixed black and white: *tail* with dusky and yellowish bars: *feet* with sometimes a small toe behind.

204. Ch. *Cantianus*. Grey-brown, beneath, front, and throat white: crown crossed by a black band: hind-head ferruginous: bill and legs blackish.

Kentish Plover. *Lewin t.* 186. *Lath. Suppl.* 2. *p.* 316.

Size of the last, from which it differs in having the bill and legs blackish, in wanting the broad black collar beneath the white one, in having a broad black patch near the shoulders, in the hind-head being of a pale ferruginous, and in having the end of the tail black and more pointed.

205. Ch. *Calidris*. Bill and legs blackish: lores and rump greyish: head and back grey, with slight dusky streaks: front and body beneath white, immaculate.

Sanderling, Curwillet. *Br. Zool. t.* 73. *Lewin t.* 184.

Length 8 inches: *extent* 15 inches; *weight* near 2 ounces.

Bill an inch long: *iris* dusky; *cheeks* and over the *eyes* white: *body* above grey with dusky shafts: *quills* dusky, the ſecondaries grey tipt with white: *tail* shorter than the wings, grey with paler margins. *Female* with a ferruginous tinge. *Young bird* with large black angular ſpots on the back.

206. Ch. *Hiaticula*. Grey-brown, beneath white: crown crossed by a black band: neck with a white collar, beneath which is a broad black-one: legs orange.

Ringed Plover. *Lewin t.* 185. *Donov. t.* 18, *Walcot. t.* 161.

Length 7 or 8 inches: *extent* 16 inches: *weight* nearly 2 ounces.

Bill orange, tipt with black: *iris* hazel: from the bill to the *eyes* a black stripe ending in a broad black patch; *front* white: *hind-head* grey-brown: greater *wing-coverts* partly tipt with white: *quills* dusky: *tail* black towards the end, tipt with white.

207. Ch. *Morinellus*. Breast dull orange, over which is a white band, and above that a black one: across the eyes a white stripe: legs blackish.

Dottrel. *Br. Zool. t.* 73. *Lewin t.* 187. *Donovan t.* 42.

Length near 10 inches: *extent* 18: *weight* about 4 ounces.

Bill dusky, depressed in the middle: *front* dusky and grey: *hind-head* blackish: *cheeks* and *chin* white: *back* and *wings* brownish-olive, with pale ferruginous margins: middle of the *belly* blackish, reddish-white beneath: *quills* dusky, the outer-web of the first white: *tail* olive-brown, with a blackish band near the end, tipt with white.

40. CURSORIUS. *Courser.*

208. C. *Himantopus*. Bill longer than the head; body white, with glossy black back and wings: legs red.

Charadrius Himantopus. *Linn. Syst. Lath. Synops.*

Long-legged Courſer. *Lewin t.* 183. *Donovan t.* 55. *Walc. t.* 159.

Length from the end of the bill to the end of the tail 13 inches, to the end of the claws 18: *extent* 2 feet 6: *weight* 5 ounces.

Bill black, 2 inches and a half long, tapering to a point, the upper mandible a little longer and bent over the lower; *iris* red:

front, orbits, and *rump* white : *crown* black : *neck* with or without dusky streaks : *tail* greyish, the outer feathers white : *legs* 4 inches and a half long : *claws* black.

Obs. From its slender make, sharp-pointed slightly-curved bill, and long legs, this bird appears rather to belong to this genus, than that of Charadrius.

209. C. *europæus.* Cream-colour with dusky streaks, sides of the head chin and belly paler : through the eyes a pale streak : quills and spot near the tip of the lateral tail-feathers blackish : legs pale buff.

European Courſer. *Lewin t,* 188. *Lath. Suppl. t.* 116.

Size of the golden plover, but of a more slender make.

Bill black, 3 quarters of an inch long : *iris* hazel : behind the *eyes* a blackish patch : *plumage* above cream-colour with undulate tranſverſe dusky lines, darker on the back : *tail* cream-colour, marked with black near the tip except the 2 middle feathers.

41. HÆMATOPUS. *Sea-pie.*

210. H. *ostralegus.*

Pied Oyster-catcher. *Br. Zool. t.* 74. *Lewin t.* 189. *Donov. t.* 62.

Length 16 inches : *extent* 31 inches : *weight* 16 ounces and a half.

Bill 3 inches long, orange : *iris* crimſon : under the *eyes* a ſmall white ſpot : *body* above black, beneath white : *throat* black, with or without a white creſcent acroſs it : *breaſt* and *belly* white : *wings* crossed with a white band : *rump* and upper-half of the *tail* white : *legs* orange : *claws* black.

42. RALLUS. *Rail.*

211. R. *aquaticus.* Above olive-brown with dusky spots, beneath dark-grey : flanks with transverse black and white spots : lower mandible reddish.

Water Rail. *Br. Zool. t.* 75. *Lewin t.* 190. *Donov. t.* 104.

Length 12 inches : *extent* 16 : *weight* 4 ounces and a half.

Bill black above edged with red : *iris* red : *crown* with a white ſpot : *plumage* above black edged with dingy-brown : *chin* dirty-white : sides of the *head*, forepart of the *neck* aud *breast* dark hoary lead-colour, slightly tinged with pale rufous : ridge of the *wings* white, the inside barred with brown and white, quills and ſecondaries dusky, side-feathers barred with black and white, and slightly tipped with a pale reddish-brown : inner-side of the *thighs* and *vent* pale yellowish-brown : *tail* of 12 feathers, dusky edged with brown : *legs* placed far behind, dull dirty flesh-colour : *toes* long, without any connecting membrane. *Dillwyn.*

43. GALLINULA. *Gallinule.*

212. G. *Crex.* Rufous-brown with blackish spots, beneath pale yellowish-brown : wings reddish-bay.

Crake, Land Rail. *Br. Zool. t.* 75. *Lewin t.* 191. *Donovan t.* 116.

Length 9 inches and a half : *weight* from 6 to 8 ounces.

Bill grey-brown : *iris* light hazel : *chin* very pale : *flanks* with a few tranſverſe brown streaks : greater *wing-coverts* whitish at the ends : *quills* dusky-bay : *tail* like the back : *legs* pale brown.

213. G. *chloropus.* Front fulvous : garters red : body blackish : outer edge of the wings and vent white.

Moor-hen. *Br. Zool. t.* 77. *Lewin t.* 192. *Donovan t.* 110.

Length 14 inches : *extent* 22 : *weight* about 15 ounces.

Bill red at the baſe, greenish towards the point : *iris* reddish : *body* above deep olive brown, beneath paler : *flanks* with white stripes : *quills* and *tail* dusky brown : above the *knees* a red garter :

legs dull green. *Female* without the red on the bill, and in ſome the chin and belly are marked with white.

214. G. *Porzana.* Above olive-brown variegated and spotted with dusky and whitish, beneath grey with white and brown spots: 2 middle tail-feathers edged with white.

Spotted Gallinule. *Lewin t.* 193. *Donov. t.* 122. *Walcot. t.* 172.

Length 9 inches: *extent* 15: *weight* above 4 ounces.

Bill greenish-yellow, reddish at the baſe: *Iris* reddish: over the *eyes* a grey stripe: *flanks* with dusky and white bars: *vent* and under *tail-coverts* yellowish-white: *legs* pale olive-green.

ORDER VII. PINNATIPEDES.

44. PHALAROPUS. *Phalorope.*

215. Ph. *hyperboreus.* Grey, beneath white: breast grey: wings with a white band: beneath the rump white: sides of the neck ferruginous. *Female*, grey beneath: eye-brows and base of the greater wing-coverts reddish: rump rufous.

Red Phalarope. *Sow. Miſc. t.* 10. *Lewin t.* 194. *Br. Zool. t.* 76.

Length 7 or 8 inches. *Bill* black: *iris* hazel: *eyebrows* white: *ſcapulars* margined with dull yellow: *quills* dusky, the ſecondaries tipt with white: *rump* barred dusky and white: *tail* dusky: *legs* lead-colour. *Female* above blackish with rufous margins: over the eyes a rufous streak: rump rufous: breast and belly rufous.

216. Ph. *lobatus.* Bluish-grey with dusky spots, beneath white: head white: wing-coverts, wing and tail-feathers blackish, with whitish margins.

Grey Phalarope. *Br. Zool. t.* 76. *Lewin t.* 195. *Walcot t.* 156.

Size ſomething larger than the Purre: *weight* an ounce.

Bill black, a little flattened at the top: *crown* often with a dark patch: *cheeks* with a dusky ſpot: *legs* compressed, lead-colour.

45. FULICA. *Coot.*

217. F. *atra.* Front white or reddish: body blackish, beneath dusky-grey: wings edged with white: garters yellow.

Bald Coot. *Br. Zool. t.* 77. *Lewin t.* 196. *Donovan t.* 106.

2. Larger, plumage deeper: front white: garters black.

3. White, with a few black ſpots on the head and wings.

Length 16 inches: *extent* 30: *weight* 24-28 ounces.

Bill pale: *iris* hazel: *legs* dull green. *Female* rusty-brown on the breast.

46. PODICEPS. *Grebe.*

218. P. *cristatus.* Dusky brown, beneath white: head rufous, enlarged with a crest: collar black: inner quills white, *Adult bird.* Cheeks and throat with a bright tawny pendent ruff, 2-*year old.* Head smooth, wings with a white spot, *Young bird.*

Crested Grebe. *Br. Zool. t.* 78. *Lewin. t.* 197. *Donov. t.* 68.

Length 23 inches: *breadth* 33: *weight* between 2 and 3 pounds.

Bill dusky towards the point, reddish at the baſe: *iris* crimſon: *creſt* erect each side the head, dusky: from the bill to the *eyes* a black line, with a white one above it: primary *quills* dusky, ſome of the inner-ones tipt with white: legs dusky or greeniſh.

219. P. *auritus*. Blackish-brown, breast and belly white: ears with an orange tuft: sides dull ferruginous.

2. Head and tufts brown: ſides of the head white: neck before and ſides white with ferruginous ſpots.

Eared Grebe. *Br. Zool. t.* 79. *Lewin t.* 198. *Donov. t.* 29.

Length 12 inches: *extent* 22: *weight*

Bill black, reddiſh at the baſe: *iris* red: *head* and *neck* black: *wings* with a white band and edge near the firſt joint: *legs* duſky or dull green.

220. P. *obscurus*. Dusky-brown, beneath white: from the bill to the eyes a bald reddish or brown stripe: edge of the wings and middle quill-feathers white.

Dusky Grebe. *Br. Zool. t.* 78. *Lewin t.* 199. *Donov. t.* 44.

Length 11 inches: *extent* 20: *weight*

Bill blackiſh, with a red or fleſh-colour edge: *iris* red: *cheeks* in ſome ferruginous: *front* often white: *primary quills* duſky; *legs* duſky green, ſometimes ſpotted between them.

221. P. *Cornutus*. Head crested, tumid, black with a tinge of green: from the bill through the eyes a dull orange bar: under part of the neck bright chesnut.

Horned Grebe. *Sloan Jam. t.* 271. *f.* 1. *Montague Dict.*

Length 13 inches and a half: *extent* 22: *weight*

Bill duſky: *iris* and *lores* crimſon: round the *pupil* a circle of white: *cheeks* and *throat* with a blackiſh-green ruff: from the *bill* a broad orange ſtripe forming a tuft on each ſide the hind-head: *front* dark ferruginous: *body* above dark brown mixed with ferruginous and grey: *inner-quills* white: *chin* black, a little mixed with white: *belly* and *vent* gloſſy white: *legs* duſky on the outſide, pale within.

222. P. *rubricollis*. Head slightly crested: body above deep brown: cheeks and chin pale cinereous: forepart of the neck red ferruginous: belly and secondary quills white.

2. Head ſmooth, black: neck mixed with duſky on the fore-part: belly mottled with duſky.

3. A white band acroſs the lower part of the neck.

Red-necked Grebe. *Lewin t.* 200. *Donovan t.* 6. *Walcot t.* 103.

Length 18 inches: *extent* 2 feet 4: *weight*

Bill black, yellowiſh towards the baſe: *iris* orange: *lores* brown or blackiſh: *cheeks* and part of the *neck* light grey: *breast* mixed ferruginous and duſky: *sides* with duſky marks: *wings* with a white band: *legs* duſky.

223. P. *minor*. Reddish-brown, breast and belly silvery-white mottled with grey: cheeks pale ferruginous: fore-part of the neck grey: lowest part of the rump and spot on the wings silvery-white.

Didapper, Dabchick. *Lewin t.* 201. *Donovan t.* 56. *Walcot t.* 105.

Length 10 inches: *extent* 17 inches: *weight* 6-7 ounces.

Bill brown: *iris* red-hazel: *cheeks* in the youhg bird and female light grey, and the plumage with a leſs mixture of ferruginous: *quills* duſky, the inner-webs of the leſſer white; *legs* dirty green.

224. P. *hebridicus*. Blackish, chin black: fore-part of the neck ferruginous, hind-part with a dusky mixture: belly mixed silvery white and grey.

Black-chinned Grebe. *Sow. t.* 71. *Br. Zool. t.* 79. *Lewin t.* 202.
Body 8 inches long: *iris* reddiſh-hazel; *under-mandible* with a triangular yellowiſh patch at the baſe: *eggs* white.

ORDER VIII. PALMIPEDES.

47. RECURVIROSTRA. *Avocet.*

225. R. *Avocetta.* **Bill and head black: above varied with black and white, beneath white: legs blue.**
Scooping Avocet. *Br. Zool. t.* 80. *Lewin t.* 203. *Walcot t.* 66.
Length 10 inches, to the end of the toes 22: *weight* 13 ounces,
Bill near 4 inches long, flexible: *iris* hazel: under the *eyes* a white ſpot: *cheeks* white: outer *ſcapulars*, middle *wing-coverts*, and greater *quills* black: edge of the *wings*, greater *coverts*, *back*, and *tail* white: *toes* webbed more than half their length.

48. ALCA. *Auk.*

226. A. *impennis.* **Above black, beneath white: bill 2-edged, grooved across: between the bill and eyes an oval white spot: lesser quills tipt with white.**
Great Auk. *Br. Zool. t.* 81. *Lewin t.* 223. *Walcot t.* 86.
Length 3 feet: *size* nearly that of a gooſe.
Bill black, much compreſſed and curved, the baſe of the upper-mandible covered with short velvety feathers: *wings* very ſmall: *legs* black.

227. A. *arctica.* **Above and round the throat black, beneath and sides of the head white; bill 2-edged, crossed with 4 grooves: eyelids with a triangular callous protuberance above: legs orange.**
Puffin. *Lewin t.* 226. *Donov t.* 6. *Walcot. t.* 87.
Length 12 inches: *extent* 20: *weight* 12 ounces.
Bill short, very deep at the baſe, the half near the head bluiſh-grey the other half red; upper-mandible ſurrounded at the baſe with a callous dotted ridge, with 4 white furrows in the red part; lower mandible with only 3 furrows: *nostrils* an oblong cleft at the bottom of the upper-mandible: *eyelids* with a triangular bluiſh callosity above and an oblong transverſe one below: *chin* white or grey: *claws* black.

228. A. *Torda.* **Brownish-black, beneath white from the middle of the throat: wings with a white band: bill crossed with 4 grooves: from the bill to the eyes a white line.**
Razor-bill. *Br. Zool. t.* 82. *Lewin t.* 225. *Donov. t.* 64.
Length 18 inches: *extent* 27: *weight* 27 ounces.
Bill much compreſſed, black, the middle-groove white: *head*, *chin*, *throat*, and *neck* dusky-black: *quill-feathers* with a mixture of grey on the outer webs: *tail-feathers* pointed: *legs* dusky.

229. R. *Pica.* **Black, beneath white, including the sides of the head, chin and throat: wings with a white band: bill crossed with 3 furrows or none.**
Black-billed Auk. *Walcot t.* 85. *Briſs.* vi. *t.* 8. *f.* 2.
Leſs than the last, from which it differs in having the sides of the *head*, *chin*, and *throat* white: *mouth* white within: and the furrow on the *bill* next the baſe white.

230. A. *Alle.* **Black, beneath white: wings with a white band; bill convex, conic, without grooves. legs greenish-black.**

Little Auk. *Br. Zool. t.* 82. *Lewin t.* 224. *Walcot t.* 88.
Length 9 inches : *weight* about 4 ounces.
Bill black : the whole of the *head, chin, throat,* and *neck* ſometimes black.

49. URIA. *Guillemot.*

231. U. *Troile.* Blackish-brown, breast and belly white: secondary quill-feathers tipt with white.

Foolish Guillemot. *Lewin t.* 221. *Donov. t.* 28. *Walcot t.* 96.
2. Body ſpotted with white. *Br. Zool. t.* 83.
Length 17 inches : *extent* 27 : *weight* 25 ounces.
Bill black, 3 inches long : *iris* dusky : from the *eyes* a dusky streak pointing backwards : *sides* with a few dusky streaks : *legs* dusky.

232. U. *minor.* Black-brown, cheeks and all beneath white; secondary quill-feathers tipt with white.

Lesser Guillemot. *Br. Zool. t.* 83. *f.* 1.
Length about 16 inches : *weight* 18 or 19 ounces.
Differs from the last, of which it is probably only the younger bird, in having the cheeks, throat, and all underneath white.

233. U. *Grylle.* Black, wing-coverts white; legs red.

Black Guillemot. *Lewin t.* 222. *Walcot t.* 99.
Length 14 inches : *extent* 22 : *weight* 14 ounces.
Bill black : *mouth* yellow-red within : *wings* with a white ſpot, which is ſpotted in the young bird; the ſecondary quills tipt with white.

50. COLYMBUS. *Diver.*

234. C. *glacialis.* Head and neck violet-black : back and wings spotted with white : throat and hind-part of the neck with a white crescent.

Northern Diver. *Br. Zool. t.* 84. *Lewin t.* 227. *Donov. t.* 58.
Length 3 feet 5 : *extent* 4 feet 8 : *weight* 12-14 pounds.
Bill dusky, 4 inches and a half long : *iris* purplish : *head* and *neck* glossy changeable black : sides of the *breast* with black lines : *back ſcapulars* and *wing-coverts* black with white oblong or round ſpots : *breast* and *belly* white : *quills* and *tail* black : *legs* black.

235. C. *Immer.* Above blackish-brown with paler undulations, beneath entirely white.

Imber Diver. *Br. Zool. t.* 84. *Lewin. t.* 228. *Donov. t.* 99.
Length 2 feet 7 : *extent* 4 feet 9 : larger than a goose.
Bill 4 inches long, dark olive : *iris* hazel : *head* and *nape* brown : *front,* sides of the *neck* and *cheeks* ſpeckled with brown : *back* and *wings* dark tawny-brown with paler undulate lines : *legs* dusky.

236. C. *stellatus.* Dusky with oval white spots, beneath white : head and forepart of the neck speckled with grey: feathers at the sides fringed with greyish-white.

Speckled Diver, Loon. *Lewin t.* 229. *Walcot t.* 101.
Length 27 inches : *extent* 3 feet 9 : *weight* near 4 pounds.
Bill pale horn-colour : *iris* yellowish-brown : back part of the *neck* plain dusky-brown : *quills* and *tail* dusky : *sides* with dusky streaks : *legs* dusky, greenish-grey inside.

237. C. *arcticus.* Head grey : fore-part of the neck violet-black with a short white band, the sides with black and white lines : scapulars and coverts with white spots.

Black-throated Diver. *Br. Zool. t.* 85. *Lewin t.* 230.

Length 2 feet : *extent* 3 feet 5 : *weight* near 3 pounds.

Bill black : *iris* hazel : *back, quills* and *tail* black : *ſcapulars* with ſquare white ſpots, *wing-coverts* with round ones : *breast* and *belly* white : *legs* dusky, reddish within.

238. C. *septentrionalis*. **Above dusky-brown with white lines and specks, beneath white : neck with a chesnut-red patch on the fore-part.**

Red-throated Diver. *Br. Zool. t.* 85. *Lewin t.* 231. *Donovan t.* 78.

Length 2 feet 5 : *extent* 3 feet 9 : *weight* about 3 pounds.

Bill dark horn-colour : *iris* hazel : *head* grey : *neck* above with whitish lines, on the lower part beneath with dusky lines : *quills* and *tail* dusky : *sides* and *thighs* with dusky streaks : *vent* dusky : *legs* dusky, lighter within.

51. STERNA. *Tern.*

239. St. *Boysii*. **White, crown black : front with white spots : back and wings lead-grey : quills blackish, with white shafts.**

2. Body variegated : ears with a black ſpot.

Sandwich Tern. *Lewin t.* 204. *Donov. t.* 120. *Walcot. t.* 120.

Bill black : *iris* dusky : *front* ſometimes wholly blaek : primary *quills* tipt with black, the inner-webs white towards the baſe : *tail* long, forked, the outer-feathers grey on the outer-webs : *legs* dusky with a reddish tinge.

240. St. *Hirundo*. **Bill and legs red : crown and front black : tail forked, the outmost feathers black on the outer webs.**

Common Tern. *Br. Zool. t.* 90. *Lewin t.* 205. *Donov. t.* 23.

Length 14 inches : *extent* 30 : *weight* about 4 ounces.

Bill tipt with black : *iris* hazel : lower part of the head and all beneath white : *back* and *wings* lead-grey : *tail* white : *claws* black.

241. St. *minuta*. **Bill and legs yellowish-red : crown black, front white : from the bill to the eyes a black stripe : tail forked, the outmost feathers all white.**

Lessser Tern. *Br. Zool. t.* 90. *Lewin t.* 206. *Donovan t.* 96.

Length 8 inches and a half : *extent* near 20 : *weight* 2 ounces.

Bill tipt with black : *iris* dusky : *back* and *wings* grey : lower-part of the head and all beneath white : *tail* white.

242. St. *fissipes*. **Black, back and wings grey : vent white : tail slightly forked.**

Black Tern. *Lewin t.* 207. *Donov. t.* 74. *Walcot. t.* 122.

Length 10 inches : *extent* 24 inches : *weight* near 3 ounces.

Bill black : *iris* dusky : *front* and sides of the *head* ſometimes mottled with white : *tail* grey : *legs* black.

52. LARUS. *Gull.*

A. *Nostrils covered with a cere.*

243. L. *Catarractes*. **Dark-brown, beneath ferruginous-grey : quills and tail white at the base : tail nearly even.**

Skua Gull. *Lewin t.* 212. *Walcot t.* 117.

Length 2 feet : *extent* 4 feet 6 : *weight* 3 pounds.

Bill black, much curved at the point ; the upper mandible covered half way down with a cere : *plumage* above with dull ferruginous margins : *front* and *chin* with a grey tinge : *legs* black ; hind-toe short.

244. L. *crepidatus*. Variegated olive-brown and yellowish, beneath paler: shafts and tips of the quills white: fore-part of the toes and webs black.

Black-toed Gull. *Br. Zool. t.* 86. *Lewin t.* 217. *Walcot t.* 118.

Length 15 inches: *extent* 39 inches: *weight* near 11 ounces.

Bill dusky: *iris* dark brown: *head* and *neck* with longitudinal brown and whitish lines: *plumage* above edged with yellowish or whitish, beneath crossed with the ſame: outer webs of the *quills* black, lower-part of the inner white: *tail* black with yellowish bars, tipt with white: *legs* and part of the *toes* lead-colour.

245. L. *parasiticus*. Head and chin black: back and wings blackish-lead-colour: neck, breast and belly white: 2 middle tail-feathers very long.

Arctic Gull. *Brit. Zool. t.* 87. *Lewin t.* 208. *Walc. t.* 116.

Length 21 inches: *weight* 8 or 9 ounces.

Bill lead-colour at the baſe, black at the tip: *front* and *temples* white: *neck* with a reddish tinge behind: *breast* crossed with a dark bar: baſe of the *quills* white on the inner-webs: 2 middle *tail-feathers* 4 inches longer than the rest: *legs* black.

Young bird entirely brown, paler beneath.

B. *Nostrils without cere.*

246. L. *ridibundus*. Whitish, head black: bill and legs purplish-red.

Black-headed Gull. *Lewin t.* 213. *Walcot t.* 115. *Fl. Scot. t.* 5.

2. White, back grey: behind the ears a brown ſpot.

Larus cinerarius. *Linn. ſyst.*

3. Whitish, head brown ſpotted with white: back grey: 10 middle tail-feathers with a black band.

Larus erythropterus. *Gmel.*

4. Above brown, beneath white: wings variegated brown and grey.

Sterna Obſcura. *Lath. Synops. Index ornithol.*

Length 15 inches: *extent* 37: *weight* about 10 ounces.

Bill slender: *iris* hazel: *eyelids* with a white spot on each side: *chin* black: *back* and *wings* more or leſs ash colour: *quills* edged and tipt with black.

247. L. *atricilla*. White, head blackish: bill red: legs black.

Laughing Gull. *Will. Angl. t.* 67. *Montague Ornith. Dict.*

Length 18 inches: larger than L. ridibundus.

Much reſembles the last, but the legs are black, and the head larger, with a stronger bill.

248. L. *marinus*. White, back and wings dusky lead-colour: primary quills black, with broad white tips.

Black-backed Gull. *Lewin t.* 209. *Walcot t.* 212.

2. Back and wings grey: primary quills black towards the tip.

3. Mixed brown grey and white: tail with a black bar near the end. *Young bird.*

Wagel Gull. *Br. Zool. t.* 88. *Lewin t.* 210.

Length 28 inches: *extent* 5 feet 8: *weight* near 5 pounds.

Bill strong, thick, yellow with an orange ſpot on the lower mandible: *iris* yellow: *eyelids* orange: *head* and *neck* white: ſecondary *quills* more or leſs tipt with white: *legs* flesh-colour.

249. L. *fuscus*. White, back and wings cinereous: primary quills dusky, black towards the end, with a white spot near the tip: legs yellow-orange.

Herring Gull. *Br. Zool. t.* 88. *Walcot t.* 113.

Length 23 inches: *extent* 52: *weight* 33 ounces.

Bill yellow, with an orange or black ſpot on the lower mandible : *iris* yellow : *eyelids* red : *head* and *neck* white : *quills* dusky. The *young* are mottled as in the last.

250. L. *canus*. White, back and wings grey : first quills black at the extremity, the fourth and fifth with a black spot at the tip, the outmost black on the outer-web.

Common Gull, Sea Mew. *Br. Zool. t.* 89. *Lewin t.* 216.

2. Grey, ſnowy beneath : head white with brown ſpots : neck brown above : wings variegated : tail white with a black band.

Winter Mew. *Br. Zool. t.* 86. *Lewin t.* 211. *Donovan t.* 77.

Length 18 inches : *extent* 3 feet 8 : *weight* about a pound.

Bill pale yellow or greenish, with a dusky point : *iris* hazel : *head* and *neck* white, with more or leſs a tinge of grey : *wing-coverts* tipt with white : behind the *eyes* ſometimes a dark grey ſpot : *legs* dirty-white with a yellowish tinge.

A variety, or probably a new species, has been taken and deſcribed by L. W. Dillwyn, differing in having the bill of equal length, but not half ſo stout : neck the ſame breadth : saddle internally twice as broad ; and the gizzard twice as large.

251. L. *tridactylus*. White, back and wings grey : outmost quills black on the outer web : tail white : back-a mere knob.

Kittiwake *Br. Zool. t.*89. *Lewin t.*215. *Walcot t.* 108.

2. Neck with a dusky ſpot or two : tail tipped with black, except the outmost feathers.

Tarrock. *Lewin t,* 214. *Walcot. t.* 109.

Length 15 inches : *extent* 3 feet : *weight* 7 or 8 ounces.

Bill greenish-yellow or dusky : *iris* dusky : *mouth* orange on the inside : *head* and *neck* white : ſecondary *quills* tipt with black : *legs* dusky.

53. PROCELLARIA. *Petrel.*

252. P. *glacialis*. White, back and wings grey : quills dusky : bill and legs yellowish.

Fulmar Petrel. *Lewin t.* 218. *Walcot t.* 89.

About the size of Larus canus. *Bill* much hooked at the end : *nostrils* placed both in one cylinder : *back-toe* a mere ſpur.

253. P. *Puffinus*. Above black, beneath white : legs dull rufous.

Shearwater Petrel. *Lewin t.* 219. *Walcot. t.* 90.

Length 15 inches : *extent* 30 : *weight* 17 ounces.

Bill yellowish, with a dusky point : *head* and upper-part of the body black : *chin* to the vent white : *legs* pale before, rufous behind.

254. P. *pelagica*. Body black, rump and vent white.

Stormy Petrel. *Br. Zool. t.* 91. *Lewin t.* 220. *Walc. t.* 91.

Length 6 inches : *extent* 13 : *size* of the Swallow.

Bill and *legs* black : *body* beneath rusty-brown : ſecondary *quills* ſome of them white at the ends : 3 outer *tail-feathers* whitish at the baſe.

54. MERGUS. *Merganser.*

255. M. *Merganser*. Slightly crested, white : head, upper part of the neck and back, and quills glossy-black : tail grey.

Gooſander. *Br. Zool. t.* 92. *Lewin t.* 232. *Donov. t.* 49.

Length 2 feet 4 : *extent* 3 feet : *weight* 4 pounds.

Bill and *legs* red : *iris* reddish-orange : *head* and upper-part of the *neck* glossy greenish-black : lower-part of the *neck, wing-coverts,* and parts underneath white : *sides* with dusky undulate lines : lower-part of the *back* and *rump* grey.

256. M. *Castor.* Crested, grey : head and upper-part of the neck ferruginous : chin, ends of the middle quill-feathers and belly white.

Dun Diver, *Br. Zool. t.* 92. *Lewin t.* 233. *Donovan t.* 65.

Length 27 inches : *extent* 35 : *weight* near 3 pounds.

Bill orange, with a black nail : *iris* purplish : *chin* and *throat* whitish : *breaſt* and lower-part of the neck before grey-buff : greater *quills* black : *legs* orange.

257. M. *Serrator.* Crest of the male pendent : head and upper parts of the neck and back glossy-black : neck with a white collar : breast ferruginous mixed with black : rump with grey and brown streaks.

Red-breasted Merganſer. *Br. Zool. t.* 93. *Lewin t.* 234.

Length 21 inches : *extent* 28 : *weight* near 2 pounds.

Bill and *legs* dull orange : *iris* red : lower-part of the *neck* white forming a collar : lower-part of the *back, tail-coverts* and *vent* grey with dusky undulate lines : *ſcapulars* and *wing-coverts* mixed black and white : *belly* white. *Female* hardly crested : the head and upper-part of the neck dull rufous : back and ſcapulars dark grey.

258. M. *Albellus.* Crest pendent : hind-head, upper-part of the back and temples black : body white : wings black and white. *Female,* head hardly crested, tawny-grey : across the eyes a black band. under which is a white spot.

Smew, White Nun. *Lewin t.* 235. *Walcot t.* 82.

2. Head and upper-part of the neck ferruginous : cheeks without the oval black ſpot : above grey-brown, beneath and chin white : wings with a white ſpot before and behind.

Minute Merganſer. *Lewin t.* 236. *Donovan t.* 52,

Length 18 inches : *extent* 26 : *weight* 2 pounds.

Bill black : *nape* under the crest with an oblong black mark : on the lower-part of the *neck* 2 black stripes pointing forwards : *tail* grey tipt with black : *legs* lead-colour. *Female,* bill lead-colour, breast clouded with grey, back dusky mixed with grey.

55. ANAS. *Duck.*

259. A. *Cygnus.* Bill semicylindrical, black : cere yellow : body pure white.

Wild Swan. *Br. Zool. fol.* 149. *t. addend. Edw. t.* 150. *Walcot t.* 55.

Length 4 feet 10 : *extent* 7 feet 3 : *weight* 13-16 pounds,

Bill between 4 and 5 inches long, black at the end, yellow towards the baſe, and bare of feathers up to the eyes : *iris* yellow : plumage with a few grey or rusty marks in the young birds : *legs* black : *ribs* only 11.

260. A. *Olor.* Bill red, black at the nail and sides, with a black fleshy tubercle at the base : body pure white.

Tame Swan. *Br. Zool. fol.* 149. *t. add. Walcot t.* 56. *Edw. t.* 150.

Much larger than the last : *plumage* cinereous till the ſecond year: *legs* dusky : *ribs* 12.

261. A. *ruficollis.* Bill dusky with a black nail : above black, beneath white : neck rufous, with a longitudinal white stripe each side : before the eyes an oval white spot.

Red-breasted Gooſe. *Pall. spic.* vi. *p.* 21. *tab.* 4.

Length 21 inches: *weight* about 3 pounds.

Iris yellow: *crown* black: *front* and *cheeks* mixed with white: between the bill and *eyes* an oval white ſpot: over which is a black line: *chin* and *throat* black: *breast* with a black and white band: *sides* with black stripes: *tail-coverts* white: *legs* black.

262. A. *Anser*. Bill semicylindrical, fleſh-colour with a white nail: body above grey, beneath paler mixed with grey: neck striate longitudinally.

Grey-lag Gooſe. *Walcot t.* 61. *Albin* i. *t.* 90.

Length 2 feet 9: *extent* 5 feet: *weight* 8 or 9 pounds.

Head and *neck* grey with an ochraceous mixture: *ſcapulars* edged with white: *wings* various shades of grey with paler margins: *quills* more or less dusky at the ends: *rump* and *vent* white: *wings* without the coloured ſpot: *tail* tipt with white: *legs* fleſh-colour. Varies much in its colours by domestication.

263. A. *Albifrons*. Bill fleſh-colour, with a white nail: body grey mixed with brown and white: front white.

White-fronted Gooſe. *Br. Zool. t.* 94. 1. *Denov t.* 102. *Walc. t.* 64.

Length 2 feet 4 - *extent* 4 feet 6: *weight* 4 to 5 pounds.

Bill with an orange ſpot at the baſe: *iris* dusky: *body* above brown edged with grey: *breast* and *belly* with large black and white patches: *quills* dusky, the primaries grey on the outer-webs: *rump* and *vent* white; *tail* dusky, edged with white: *legs* orange-yellow.

264. A. *Segetum*. Bill pale red with a blackish nail: body grey-brown, beneath paler: wings grey, the larger coverts and secondary quills tipt with white.

Bean Gooſe. *Br. Zool. t.* 94. 2. *Walcot t.* 65.

Length 2 feet 7: *extent* 4 feet 11; *weight* 5-7 pounds.

Bill dusky at the baſe, much compressed at the end: *iris* hazel; *front* mixed with white, behind which the feathers are dusky: greater *quills* blackish, with grey outer-webs, ſecondaries grey with black outer margins: *tail* edged with white: *legs* dull orange.

265. A. *erythropus*. Bill black, with a fleſh-colour spot each side: body grey, undulate above with black and white: neck black: face and belly white.

Bernacle Gooſe. *Hayes t.* 24. *Walcot t.* 62.

Length 25 inches: *extent* 4 feet 5: *weight* 5 pounds.

Front, chin, and *cheeks* white: from the bill to the *eyes* a black line: *crown, neck* and upper-part of the *back* black: upper *tail-coverts* white: *rump* and *tail* black, the latter white at the sides: *legs* dusky.

266. A. *Bernicla*. Bill black: head, neck, and breast black: a white creſcent each side the neck.

Brent Gooſe. *Albin* 1. *t.* 93. *Hayes t.* 25. *Walcot t.* 63.

Length 28 inches: *extent* 4 feet: *weight* 2 pounds and a half.

Back, ſcapulars, and *coverts* brownish-black, beneath paler: *tail-coverts* and *vent* white: *sides* with white lines: *tail* black: *legs* black. The young bird wants the white creſcent on the neck.

267. A. *mollissima*. Bill black, cylindrical; cere bifid and wrinkled on the hind-part.

Eider Duck. *Br. Zool. t.* 95. *Edw. t.* 98. *Walcot t.* 66.

Length 1 foot 10: nearly twice the size of the common duck.

Feathers of the *front* and *cheeks* proceeding far into the baſe of the bill, and forming two sharp angles: *front* silvery black: from the bill across the *eyes* a broad black stripe; beneath the hinder ends of which is a pea-green patch: *crown, cheeks, neck, back* and *wings* white: *quills* black: *breast, belly* and *tail* black: *legs* dull green.

The *young* have the *neck* and *breast* ſpotted black and white.

Female, reddish-brown barred with black: head and upper-part of the neck with dusky longitudinal streaks: wings with 2 white bands: belly deep brown with obſcure black marks: tail dusky.

268. A. *spectabilis.* Bill orange, with a flat compressed gibbosity at the base, divided by a feathery ridge: head pale ash-colour.

King Duck. *Arct. Zool.* ii. *n.* 481. *Edw. t.* 154.

Length nearly 2 feet. *Front* pea-green, passing backwards each side the neck, and including half the eye: *chin, throat,* and *breast* dirty white, with a black mark diverging each side on the former: *back, belly,* and *vent* black: *wings* dusky with a white patch: *quills* black, with ferruginous ſhafts, a white ſpot on each side the outer-ones: *tail* wedge-form, black: *legs* dusky.

Female brown, the middle of each feather black. *Young bird* without the protuberance on the bill.

269. A. *nigra.* Bill gibbous at the base, without the nail at the end, black with a line of orange halfway down the middle: body entirely black.

Scoter. *Walcot* i. *t.* 59. *Will. Angl. p.* 336. *t.* 74.

Length 22 inches: *extent* 34: *weight* 2 pounds 9 ounces.

Bill yellow in the middle: *head* and *neck* glossy purplish-black: *tail* wedge-form, of 16 pointed feathers: *legs* black.

Female without the gibbosity on the bill, brown: *chin* and *throat* greyish: *belly* varied with whitish.

270. A. *fusca.* Bill gibbous at the base, yellow, black at the sides, with a reddish nail: body blackish: under the eyes a white mark: wings with a white band.

Velvet Duck. *Br. Zool. t.* 96. *Walcot t.* 58.

Length 20 inches: larger than the common drake.

Bill broad: *head* black with a tinge of green: *plumage* inclining to brown beneath: under the *eyes* a white patch passing backwards: *legs* red. *Female* brown, without the protuberance on the bill.

271. A. *histrionica.* Dusky-brown, varied with white and blue: over the eyes a ferruginous stripe: ears and line down the sides of the neck white: neck and breast crossed with a white band. *Female,* grey brown: ears white: primary quills blackish.

Harlequin Duck. *Sowerby Brit. miscel.* 1. *p.* 11. *t.* 6.

Length 17 inches: *extent* 26: *weight* near 19 ounces.

Bill blackish, with a white patch from its baſe to the eyes: *crown* black: *neck* black, with a white ſpot above the white line: *breast* bluish-grey, with a white collar ſpotted and bounded with black, beneath a white band: *sides* dull rufous: *wings* with a blue ſpot bounded forwards by a tranſverſe white line: *legs* bluish-black.

Female less, front and cheeks white: breast and belly barred with pale rufous and whitish: quills and tail dusky.

272. A. *Boschas.* Bill straight, yellowish-green: head and neck glossy-green, with a white collar beneath: breast purplish-chesnut: wing-spot purplue-blue, above which is a black and a white band: middle tail-feathers, of the male, recurved.

Wild Duck, Mallard *Br. Zool. t.* 97. *Donov. t.* 124. *Walcot t.* 77.

Length 23 inches: *extent* 35: *weight* 2 pounds and a half.

Neck with a white collar reaching more than half way round: *back* brown: *sides* and *ſcapulars* white, with undulate brown lines: *belly* pale grey with brown undulate lines: 4 middle *tail-feathers* glossy black, curved upwards, the rest grey-brown edged with white.

Female, reddiſh-brown ſpotted with black, and the middle tail-feathers not recurved. It varies much in colours by domeſtication.

273. A. *Marila.* Bill bluish: head and neck black, with a green gloss: breast black: back and wings pale grey, with minute undulate black lines: wing-spot and belly white.

Scaup Duck. *Br. Zool. t.* 100. *Walcot* i. *t.* 60.

Length about 21 inches: *weight* from 30 to 35 ounces.

Bill with a black nail: *iris* golden: *head* and *neck* ſometimes varying in colours: lower-part of the *back, rump, tail* and *vent* black: *quills* duſky: *legs* lead-colour.

274. A. *frænata.* Bill black, with a white ring at the base: body ferruginous-brown: wing-spot and belly white.

White-faced Duck. *Sowerby Brit. miſcel.* 2. *p.* 5. *t.* 62.

Size of the laſt. *Head* brown: *neck* ferruginous: *ſides* with ſmall white ſpots: primary *quills* black: *tail* rounded: *legs* black.

275. A. *Tadorna.* Bill turned upwards, red, with a knob at the base: head greenish-black: breast with an orange-bay band crossed by a brownish stripe running down the belly: wing-spot glossy copper-green.

Shieldrake. *Donovan t.* 71. *Albin t.* 94. *Walcot t.* 57.

Length 2 feet: *breadth* 3 feet 6: *weight* 2 pounds 10 ounces.

Bill with a black nail: *iris* duſky: lower-part of the *neck* white: middle of the *back* white: *ſhoulders* and ſome of the *ſcapulars* black: firſt *quills* black, the next violet, inner-ones ferruginous, the laſt white: *belly* white: *tail* white, more or leſs tipt with black: *legs* red.

276. A. *clypeata.* Bill black, dilated and rounded at the point, with an incurved nail: head glossy, violet-green; breast white: belly chesnut: wing-coverts pale blue.

Shoveler. *Albin* i. *t.* 97. 98. *Hayes t.* 27. *Walcot t.* 67.

Length 21 inches: *extent* 2 feet 7: *weight* 22 ounces.

Bill much ſpread at the end: *iris* yellow: *breaſt* and *ſcapulars* white: *back* brown: greater *wing-coverts* brown, tipt with blue: *wing-ſpot* green: *vent* black: outer *tail-feathers* white, the reſt edged with white: *legs* orange-red.

277. A. *rubens.* Bill brownish-yellow, broad at the end: body brown: throat and breast reddish-brown: wing-spot purple, edged with white: tail short, whitish.

Red-breaſted Shoveler. *Br. Zool.* ii. *p.* 597. *n.* 281.

Size of the common Duck. *Iris* yellow: *back* brown, paler towards the ſides: *vent* bright brown, with darker ſpots: *legs* reddiſh-brown. *Female,* with the wing-ſpot blue.

278. A. *streptera.* Bill black: head reddish-brown spotted with black: wing-spot black, with a rufous margin on the fore-part, and a white one behind.

Gadwall. *Walcot t.* 68. *Will. Angl. p.* 374. *t.* 72.

Length 19 inches: rather leſs than A. Penelope.

Sides of the *head, throat,* and fore-part of the *neck* pale rufous with brown ſpots: lower-part of the *neck,* upper-part of the *back* and *breaſt* brown with curved white lines: lower-part of the *back* brown: *rump* and *vent* black: *belly* and *ſides* with whitiſh and grey-brown lines: *tail* aſh-colour edged with white: *legs* orange.

Female, breast reddish-brown with black ſpots, without the curved lines.

279. A. *Penelope.* **Bill lead-colour, tipt with black: head bay spotted with black; front yellowish-white: back with grey and blackish undulate lines: vent black.**

Wigeon. *Walcot t.* 71. *Will. Angl. p.* 375. *t.* 72.

Length 20 inches : *extent* 27 : *weight* near 24 ounces.

Breast purplish, with often black ſpots : *belly* white : *wing-ſpot* blue-green, black before and behind : *wing-coverts* brown, ſometimes varied with white : *quills* dusky tipt with black : 2 middle *tail-feathers* longer than the rest, dusky ; the rest grey edged with rufous-brown : *legs* dusky.

Female, brown with darker ſpots, breast paler.

280. A. *glocitans.* **Bill lead-colour, tipt with black: head slightly crested, green, with a ferruginous spot before and behind the eyes: back dark-brown with black waves: wing-spot green, edged with white.**

Bimaculated Duck. *Br. Zool.* ii. *n.* 287. *t.* 100. *f.* 2.

Length 20 inches : *extent* 25 and a half.

Crown green-brown, with a brown streak on the nape : *throat* deep purple : *head* bright green, streaked down the neck : *breast* ferruginous ſpotted with black : *belly* dusky, ſpeckled : *wing-coverts* grey, the lower-ones with rusty streaks : *tail-coverts* changeable green : 2 middle *tail-feathers* black, the rest brown edged with white : *legs* yellow, with dusky webs.

281. A. *ferina.* **Bill blue, tipt with black: body with grey and black undulate lines: head chesnut: pectoral band, rump, and vent black.**

Pochard. *Walcot t.* 74. *Albin* ii. *t.* 98. *Will. Angl. t.* 72.

Length 19 inches : *extent* 30 : *weight* 28 ounces.

Breast with a broad black band meeting at the back: *quills* dusky: *belly* white, with dusky lines : *tail* dusky, mixed with grey : *legs* lead-colour.

282. A. *acuta.* **Bill black, bluish on the sides: head rufous-brown, with a longitudinal white stripe each side from the hind-part: back with grey and black undulate lines: 2 middle tail-feathers very long, pointed, black.**

Pintail Duck. *Walcot t.* 72. *Albin t.* 94. 95. *Will. Angl. t.* 75.

Length 28 inches : *extent* 3 feet 2 : *weight* 24 ounces.

Head with a purple tinge behind the ears : *nape* with a purple gloss : *neck* white on the lower-part before : *belly* white : *wings* brown : *wing-ſpot* violet-green, ferruginous before, white behind : *tail,* except the middle feathers, dusky edged with white : *vent* black : *legs* lead-colour. *Female,* head ferruginous with dusky streaks, wing-coverts brownish edged with grey.

283. A. *glacialis.* **Bill black, orange in the middle: body black, beneath white: front and sides of the head reddish-grey: 2 middle tail-feathers very long, narrow, pointed. *Young bird,* body white: temples, breast, back and wings black. *Female,* blackish varied with rufous and grey: back black: collar and lower-part of the belly white.**

Long-tailed Duck. *Br. Zool. t.* 98. 1. *Denov t.* 111. *Walc. t.* 73.

Length 22 inches : *extent* 29 : size of the Wigeon.

Iris red ; *nape* and *neck* before and behind white, the latter with a longitudinal dusky bar down the sides: *ſcapulars* white, long, pointed: *wings* black cheſnut: 4 middle *tail-feathers* black, 2 of them very long, the rest white: *legs* dull red.

284. A. *ferruginea*. Bill pale blue, dilated: head, neck, and body above reddish-brown: throat, breast, and belly paler.

Ferruginous Duck. *Br. Zool.* ii. *n.* 285. *t.* 99.

Weight 20 ounces: *legs* pale blue, with black webs.

285. A. *Clangula*. Bill back: body varied black and white: head tumid, black with a green and violet gloss: at the corners of the mouth a white spot.

Golden eye. *Walcot t.* 69. *Albin t.* 96. *Will. Angl. t.* 73.

Length 18 inches: *extent* 2 feet 6: *weight* 2 pounds.

Iris bright yellow: *back, rump*, and upper *tail-coverts* black: *ſcapulars* black and white: *wings* with 2 white patches: *quills* black, ſecondaries white: *breast* and *belly* white: *tail* black: *legs* orange. *Female*, head rusty-brown, neck with a grey ring, breast mixed dusky and grey, legs yellowish with dusky webs.

286. A. *Glaucion*. Bill yellowish-brown: body blackish with white lines: head dull ferruginous: neck with a white collar, and a grey one beneath it: wings with a white line.

Morillon. *Walc. t.* 70 *Brit. Zool.* ii. *p.* 588. *n.* 277.

Less than the last, of which it may be only the young bird.

Iris golden: *back* and *coverts* dusky with a few white lines: greater *coverts* dusky with a few large white ſpots: primary *quills* black, ſecondaries white: *breaſt* and *belly* white: *sides* black: *tail* dusky: *legs* yellow.

287. A. *Fuligula*. Bill blue-grey tipt with black: head with a pendent crest: body black: belly and wing-spot white.

Tufted Duck. *Albin* i. *t.* 95. *Hayes t.* 26. *Walcot t.* 78.

Length 17 inches: *extent* 2 feet 4: *weight* 25 ounces.

Bill broad: *iris* yellow: *head* and *crest* with a violet and green gloſs: *ſcapulars* with minute grey ſpecks, *vent* black: *tail* black: *legs* dusky, with black webs. *Female*, without the crest, and the plumage inclining to brown.

288. A. *Nyraca*. Bill bluish tipt with black: head, throat, breast, and flanks chesnut: back and wings blackish-olive: belly whitish: vent and wing-spot white: rump black.

Olive tufted Duck. *Sowerby Brit. Miſcel.* 1. *p.* 43. *t.* 21.

Length 16 inches. *Iris* whitish hazel: *belly* varied whitish and brown: *head* hardly creſted. *Female*, without crest, back inclining to rufous, dirty reddish where the male is cheſnut, belly clouded.

289. A. *Querquedula*. Bill black: over the eyes a broad white stripe: breast with semicircular brown and black lines: wing-spot green.

Garganey. *Br. Zool. t.* 101. *Walc. t.* 75. *Donovan t.* 21.

Length 17 inches: *extent* 28: *weight*

Crown brown with dusky lines: *chin* black: *cheeks* and upper-part of the neck purplish, with white longitudinal lines: *belly* dirty-white, with a few dusky streaks: *wing-coverts* grey, the larger-ones tipt with white: *ſcapulars* black white and grey: *wing-spot* white above and beneath: *tail* dusky: *legs* lead-colour.

Female, without the green ſpot on the wings, above brown with dusky streaks.

290. A. *Crecca.* Bill black: above and beneath the eyes a white line: breast with roundish black spots: wing-spot green.

Teal. *Walcot t.* 76. *Hayes t.* 29. *Albin* i. *t.* 100.

2. Bill and legs grey: over the eyes a white line: wing-ſpot variously coloured: belly with black ſpots.

Anas Circia. *Linn. ſyſt. Albin.* ii. *t.* 103. 104.

Length 15 inches: *extent* 23: *weight* 12 ounces.

Iris hazel: *head* and *neck* reddish-bay: behind the *eyes* a broad green patch: *body* above with black and white undulate lines: *belly* white: *vent* black: *wing-ſpot* obliquely edged above with black, beneath with white: *quills* dusky, ſecondaries black: *tail* brown: *legs* dusky. *Female*, variegated whitish and brown, vent white, wing-ſpot green.

56. PELECANUS. *Pelecan.*

291. P. *Carbo.* Bill toothless, black: head slightly crested: chin dirty-white: body black: tail rounded, of 14 feathers.

Corvorant. *Walcot t.* 92. *Albin t.* 81. *Will. Angl. t.* 63.

Length 3 feet 4: *extent* nearly 5: *weight* near 8 pounds.

Bill 5 inches long, hooked, bald and yellow round the baſe: *iris* green: *head* and *neck* generally with white longitudinal lines: *back* glossy greenish-black, the feathers with deeper margins: *chin* with a patch of white: *thighs* with ſometimes a white ſpot: *legs* black.

292. P. *Graculus.* Bill toothless, dusky: body glossy greenish-black, black-brown beneath: tail rounded, of 12 feathers.

Shag. *Walcot t.* 93. *Will. Angl. t.* 63.

Length 29 inches: *extent* 3 feet 10: *weight* about 4 pounds.

Bill near 4 inches long, bald and yellow with black ſpecks on the chin: *body* above black with a purple and green gloſs, margined with deep black: *legs* dusky; *meddle-claw* ſerrate.

293. P. *cristatus.* Bill toothless, blackish: head crested: body dark glossy-green with purplish-black edges, beneath dusky.

Crested Shag. *Brit. Zool. t.* 102.

Much reſembles the last, except in having the feathers at the sides of the head elongated into a crest, of which it may be only the full grown bird or other ſex: *tail* of 12 feathers: *legs* dusky.

294. P. *Bassanus*, Bill serrate, yellowish-white: face bald, blue: body diry-white: primary quills black.

Gannet, Soland Gooſe. *Br. Zool. t.* 103. *Walcot t.* 94.

Length 3 feet: *extent* 6 feet: *weight* about 7 pounds.

Bill 6 inches long, nearly straight: *iris* pale yellow: round the *eyes* a naked blue patch: *chin* bald, dusky: *crown* pale buff: lesser *wing-coverts* black: *tail* of 12 feathers: *legs* black, greenish before, the middle-claw ſerrate. The young birds are dusky mixed with white.

CLASS III. AMPHIBIA.

Animals highly tenacious of life, and having the power of respiring both on land and under water.

ORDER I. REPTILIA.

Furnished with feet.

1. **Testudo.** *Body* tailed, covered above and beneath with a bony horny or coriaceous shell, or with scales above: *upper-mandible* closing over the lower, like the lid of a box.
2. **Lacerta.** *Body* 4-footed, slender, tapering to a tail.
3. **Rana.** *Body* 4-footed, without tail or any covering but the skin: hind-legs longer than the fore.

ORDER II. SERPENTES.

Without feet.

4. **Coluber.** With undivided *plates* on the belly, and divided *scales* below the tail.
5. **Anguis.** With divided *scales* on the belly, and below the tail.

ORDER I. REPTILIA. *Reptiles.*

1. TESTUDO. *Tortoise.*

1. T. *coriacea.* Feet fin-like: body above brown, beneath paler: shell coriaceous, with 5 longitudinal tubercled ribs.

Coriaceous Turtle. *Br. Zool.* iii. *t.* 1. *Shaw Zool.* iii. *t.* 21.

Body growing to 6 or 7 feet long, 3 or more wide, and to the weight of 8 hundred pounds: *upper-jaw* forked, and receiving the extremity of the lower-one: *fore-fins* much longer than the hind-ones, covered with a tough leathery skin: *tail* short, pointed.

2. T. *imbricata.* Feet fin-like: body ovate, with 13 imbricate plates in the disk, and serrate round the margins.

Hawks-bill Turtle. *Shaw Zool. t.* 26. *Phil. Trans. n.* 228.

On the Orkney Isles; and in the Spring of 1774 was taken in the Severn and placed in the fish-ponds of the Author's father, where it lived till the winter.

Body growing to a large size, roundish-ovate, slightly heart-shaped, slightly carinate down the back: *head* ſmall, prominent, with the upper-bill curved over the lower: *legs* with 2 claws on each: *plates* of the disk rather ſquare, ſemitranſparent, variegated; of the circumference 25, pointed and incumbent on each other in a ſerrate manner; *tail* a mere notch.

2. LACERTA. *Lizard.*

A. *Scaly, with round whorled tails: feet all 5-toed, with nails.*

3. L. *agilis*. Above light brown with longitudinal stripes of black and white spots, beneath yellow or dirty white.

Scaly Lizard. *Br. Zool.* iii. *t.* 2. *Shaw Zool.* iii. *t.* 72.

Length 6 inches and a half. *Back* with a line of irregular black ſpots down the middle, next a stripe ſpotted alternately with black and white, then a brown ſtripe with a line of black and white ſpots: *tail* beneath dirty white, often mottled with black: *legs* ſpotted above with white on the sides.

4. L. *Œdura*. Above dark-brown with longitudinal stripes of black andyellow spots, beneath yellow or dirty-white spotted with black: sides mottled black and white.

Swelled-tail Lizard. *Shepperd Linn. Trans.* vii. *p.* 50.

Length 4 inches and a half. *Head* above ſpotted with black, beneath mottled with black: *back* with a black stripe down the middle, then a brown one each side with a line of black ſpots, next a stripe of alternate yellow and black ſpots, beneath this a brownish black stripe with a line of yellow ſpots: *tail* ſwelling-out a little below the baſe, ash-colour with a few long black marks at the end, at the baſe underneath a large red or yellowish mark: *legs* black and white on the sides.

5. L. *anguiformis*. Above light-brown with black-brown and yellow longitudinal stripes, the lower-one each side with a few yellow spots, beneath yellowish-white with a few black spots.

Viperine Lizard. *Sheppard Linn. Trans.* vii. *p.* 51.

Length 7 inches or more. *Head* with 4 dark ſpots: *back* with a black line down the middle, each side this a dark brown one, next a yellow stripe, then a dark brown-one with a few yellow ſpots: *tail* barred with black at the end: *legs* dark brown ſpotted with black.

B. *Without scales: tail compressed sideways: forefeet 4-toed, without nails.* Newts.

6. L. *vulgaris*. Above yellow-brown with minute darker spots and longitudinal deep brown stripes, beneath red with a few black dots.

Common Newt. *Br. Zool.* iii. *t.* 2. *Shaw Zool.* iii. *t.* 83.

Length 4 inches: upper *eyelids* dark brown, lower dull yellow: *tail* ribbed at the sides with dark brown.

7. L. *palustris*. Above warty and black-brown spotted with black, beneath orange bordered with large black spots: sides light brown with white spots.

Warty Newt. *Br. Zool.* iii. *t.* 3. *Shaw Zool.* iii. *t.* 83.

Length 6 inches. *Head* black above, beneath light brown with white ſpots or warts: *tail* pointed, with an obſolete white mark on the sides.

8. L. *maculata*. Above greenish-brown with 2 longitudinal brown lines, beneath bright red with dusky spots: sides with lines of brownish-black spots.

Spotted Newt. *Sheppard Linn. Trans.* vii. *p.* 53.

Length 4 inches. *Head* with 2 lines of black dots above, beneath yellowish-white with dark brown ſpots: upper *eyelids* prominent:

iris orange, pupil black : *noſe* with a ſlight longitudinal indenture, in which is a yellowiſh mark : *tail* pointed, the upper-edge black, under-edge orange : *legs* greeniſh-brown.

3. RANA. *Frog.*

9. R. *Bufo.* Lurid-brown with rufous-brown tubercles, beneath paler.

Common Toad. *Shaw Zool.* iii. *t.* 40.

Body tubercled, ſometimes obſcure olive-brown above, paler and irregularly ſpotted beneath.

10. R. *Rubetra.* Body tubercled, above dirty yellow clouded with brown, beneath paler with black spots : back with a yellow line.

Natter Jack. *Br. Zool.* iii. *p.* 19. *n.* 5.

Body 2 inches and a quarter long, one and a quarter broad : *fore-feet* 4-toed : *hind-feet* 5-toed, a little webbed.

11. R. *temporaria.* Yellowish-brown spotted with black, beneath the eyes an elongated brown patch.

Common Frog. *Shaw Zool.* iii. *t.* 28, 29, 30.

Body ſometimes dull ferruginous, beneath pale greeniſh-yellow obſcurely ſpotted and variegated : *back* flattiſh and more or leſs angular.

12. R. *esculenta.* Olive-green spotted with black : back with 3 longitudinal yellowish lines : belly whitish.

Eſculent Frog. *Shaw Zool.* iii. *t.* 31.

Body larger than the laſt, marked with roundiſh black patches, beneath whitiſh-green with brown marks : *limbs* tranſverſely barred with black : from the tip of the noſe down the *back* are 3 pale yellow ſtripes, the middle-one ſlightly depreſſed, the others ſtrongly elevated : *hind-feet* palmate.

ORDER II. SERPENTES. *SERPENTS.*

4. COLUBER. *Viper, Snake.*

13. C. *Berus.* Grey-brown, with a large lobed spot on the head : down the back a connected chain of black spots.

Common Viper. *Br. Zool.* iii. *t.* 4. *Shaw Zool.* iii. *t.* 101.

Body from a foot and a half to 3 feet long: ſometimes tawny-brown or blackiſh : *iris* orange, pupil black : *lips* variegated black and grey : *ſides* with a row of duſky ſpots : *belly* blackiſh with a bluiſh gloſs, ſpotted with black : *ſcales* carinate : *plates* of the belly 146, *ſcales* below the tail 39.

14. C. *cœruleus.* Light-brown with an angular dark-brown spot on the head : down the back a string of dark-brown rhomboidal spots : belly light blue spotted with white.

Blue-bellied Viper. *Sheppard Trans. Linn.* vii. *p.* 56.

Length 22-25 inches. *Head* with a ſpot reſembling the letter V, the ſcales of the under-part yellowiſh-white edged with dull red : *iris* red, pupil browniſh-black : ſcales on the edge of the upper-jaw yellowiſh-white edged with brown : *ſides* ſpotted with dark brown : ſcales of the *belly* ſpotted with white, ſome of the firſt row edged with white : *tail* the firſt part blue edged with red, the end yellow ſpotted with white.

15. **C. *Prester*. Entirely black, with a jet-black indented band down the back.**

Black Viper. *Shaw Zool.* iii. *p.* 375.

Much reſembles the laſt, except in colour and number of ſcales: *lips* ſpeckled with white: *plates* of the belly 153: *scales* below the tail 32.

Obs. Theſe 3 have a great affinity with each other.

16. **C. *natrix*. Olive-brown or bluish, with a black and a yellow patch each side the neck: down the sides a row of narrow black spots: belly dusky, or yellowish.**

Ringed Snake. *Brit. Zool.* iii. *t.* 4. *Shaw Zool.* iii. *p.* 447.

Body 3-5 feet long: *head* clothed with large plates: *mouth* marked with black bars at the sides: *scales* of the back carinate: *belly* whitish yellowish or brownish, with an irregular longitudinal black stripe, beginning at the 15th plate: *plates* of the belly 170: *scales* under the tail 60.

17. **C. *Dumfrisiensis*. Pale brown, with reddish-brown transverse flexuous bands in pairs.**

Dumfries Snake. *Sow. Brit. Miſcell.* 1. *p.* 5. *tab.* 3.

Body with reddish-brown ſpots on the sides between the bands: *scales* of the back not carinate: *plates* of the belly 162: *ſcales* under the tail about 80.

5. ANGUIS. *Slow-worm.*

18. **A. *fragilis*. Rufous-grey, with 3 longitudinal brown lines down the back: belly lead-colour.**

Blind-worm. *Br. Zool.* iii. *t.* 4. *Borl. Corn. t.* 28.

2. Of a darker colour: ſcales of the belly 126; under the tail 136.

Aberdeen Snake. *Br. Zool.* iii. *p.* 33.

Body 10 or 12 inches long: *head* ſmall, covered in front with large ſcales: *sides* ſometimes streaked with black and white: *ſcales* ſmall, ſoft, cloſe-ſet; of the belly 135, under the tail 135.

CLASS IV. PISCES. *FISHES.*

Animals inhabiting waters, furnished with gills for the purpose of breathing, and fins for swimming.

ORDER I. APODES.

Bony fishes, without ventral fins.

1. Anguilla. *Head* smooth: *nostrils* tubular: *eyes* covered with the common skin: *gill-membrane* 10-rayed: *body* roundish, smooth, mucous: *dorsal, caudal,* and *anal-fins* united: *spiracles* behind the head or pectoral fins.
2. Ophis. *Habit* of the Anguilla, but the *tail* is without fin at the end, causing the dorsal and anal fins to be distinct.
3. Anarichas. *Head* rounded, obtuse: *front-teeth* in each jaw, 6 or more in number, conic, strong, divergent: *grinders* in the lower-jaw and palate, rounded: *gill-membrane* 6-rayed: *body* roundish: *caudal-fin* distinct.
4. Ammodytes. *Head* compressed, narrower than the body; upper-lip doubled; lower-jaw narrow, pointed: *teeth* small, very sharp: *gill-membrane* 7-rayed: *body* long, square, rounded at the sides, with very minute scales: *caudal-fin* distinct.
5. Ophidium. *Head* somewhat naked: *teeth* in the jaws, palate, and throat: *gill-membrane* 7-rayed: *body* ensiform.
6. Leptocephalus. *Head* small, narrow: *body* very thin and flat: *pectoral fins* none.
7. Xiphias. *Head* with the upper-jaw ending in a long sword-like projection: *mouth* without teeth: *gill-membrane* 8-rayed: *body* roundish, without apparent scales.

ORDER II. JUGULARES.

Bony fishes, with the ventral fins placed before the pectoral.

8. Callionymus. *Upper-lip* doubled up: *eyes* vertical, approximate: *gill-covers* closed, with a small aperture each side the neck; the membrane 6-rayed: *body* naked: *ventral-fins* very remote.
9. Trachinus. *Head* compressed, a little rough: *gill-membrane* 6-rayed; the covers prickly, the lower piece serrate: *body* compressed: *vent* near the breast.
10. Gadus. *Head* smooth: *gill-membrane* with 7 cylindrical rays: *body* oblong, clothed with deciduous

scales: *fins* all covered with the common skin; dorsal and anal generally more than one, the rays unarmed: *ventral-fins* slender, ending in a point, 6 or 7 rayed.

11. **BLENNIUS.** *Head* sloping: *gill-membrane* 6-rayed: *body* lanceolate, a little compressed, lubricous: *ventral fins* 2, 3, or 4-rayed, unarmed.

ORDER III. THORACICI.

Bony fishes, with the ventral fins placed directly under the pectoral.

12. **CEPOLA.** *Head* short, roundish, compressed: *teeth* curved, sharp, in a single row: *gill-membrane* 4-6 rayed: *body* very long, compressed, naked: *belly* extremely short.
13. **ECHINEIS.** *Head* furnished at top with a flat oval transversely grooved shield: *gill-membrane* 9 or 10-rayed: *body* without scales.
14. **GOBIUS.** *Head* small: *eyes* approximate, with 2 punctures between them: *gill-membrane* 4-rayed: *body* compressed, clothed with small scales, with a tubercle behind the vent: *dorsal fins* 2: *ventral-fins* united into a funnel-like oval.
15. **COTTUS.** *Head* broader than the body, spinous: *eyes* vertical, furnished with a nictitant membrane: *gill-membrane* 6-rayed: *body* round, generally without scales, tapering to the tail: *dorsal-fins* often 2.
16. **ZEUS.** *Head* compressed, sloping down; upper-lip arched by a transverse membrane: *tongue* mostly subulate: *gill-membrane* with 7 perpendicular rays, the lowest transverse: *body* compressed, thin, broad, somewhat rhombic: first *dorsal-fin* generally furnished with projecting filamentous rays.
17. **PLEURONECTES.** *Head* small: *eyes* both on the same side of the head, and near each other: *mouth* arched: *jaws* unequal, toothed: gill-membrane 4-7-rayed: *body* flattened, one side a little convex and coloured, representing the back; the other flat and paler, representing the belly: *vent* near the head.
18. **SPARUS.** *Teeth* strong, disposed in one or more rows: *grinders* convex, smooth, disposed in ranges, and forming a kind of pavement in the mouth: *gill-membrane* 4-6-rayed; the covers smooth, unarmed, scaly: *lips* thick: *body* compressed; *pectoral fins* pointed: *tail* forked.
19. **LABRUS.** *Teeth* strong, rather sharp: *lips* thick: *gill-membrane* 4-6-rayed; the covers unarmed and scaly: *pectoral-fins* and *tail* rounded.

20. Perca. *Jaws* unequal: *teeth* sharp, incurved: *gill-membrane* 7-rayed; the covers scaly, of 3 pieces, the upper-piece serrate: *lateral-line* arched with the back: *scales* mostly hard and rough: *dorsal-fin* spinous on the fore-part: *vent* nearer the head than the tail.

21. Scomber. *Head* compressed, smooth: *body* oblong, smooth, sometimes carinate by the lateral line: *gill-membrane* 7-rayed: between the dorsal-fin and tail are mostly several *spurious fins*.

22. Gasterosteus. *Jaws* armed with minute teeth: *gill-membrane* 3, 6, or 7-rayed; the cover of 2 pieces, rounded and striate; *body* somewhat lengthened: *lateral-line* straight: *dorsal-fin* single, with distinct spines between it and the head: *ventral-fins* spinous: *belly* carinate or shielded on the sides, and bony beneath.

23. Mullus. *Head* compressed, sloping, scaly: *eyes* oblong, approximate, vertical, furnished with a nictitant membrane: *nostrils* double, minute: *palate* armed with small teeth: *mouth* bearded: *gill-membrane* 3-rayed; the covers of 3 pieces, very finely striate: *body* clothed with large deciduous scales.

24. Trigla. *Head* large, mailed, marked with rough lines: *eyes* large, round, vertical: *palate* and *jaws* armed with sharp teeth: *gill-membrane* 7-rayed; the cover of a single radiate spinous piece: *back* straight, with a longitudinal spinous groove each side: *pectoral-fins* with generally finger-shaped processes placed before them.

ORDER IV. ABDOMINALES.

Bony fishes, with the ventral fins placed behind the pectoral.

25. Cobitis. *Head* small, oblong, naked: *mouth* generally bearded: *eyes* seated in the upper-part of the head: *gill-membrane* 4-6-rayed: the covers of one piece, closing beneath: *body* of nearly equal thickness from head to tail, covered with mucus and small thin easily deciduous scales: *back* straight, with a single fin: *vent* nearer the tail: *tail* rounded.

26. Salmo. *Head* smooth, compressed: *tongue* cartilaginous, moveable: *teeth* in the jaws and on the tongue: *gill-membrane* 4-12-rayed; the cover of 3 pieces: *body* compressed: *back* convex, furnished on the hind-part with a fleshy fin without rays: *lateral-line* straight, nearer the back.

27. **Esox.** *Head* somewhat flattened above: *mouth* wide: *tongue* broad, loose: *teeth* sharp, in the jaws, palate, and tongue: *nostrils* double, near the eyes: *gill-membrane* 7-12-rayed: *body* lengthened, compressed: *lateral-line* straight, nearer the back, hardly visible: *dorsal* and *anal* fins short, and mostly opposite.

28. **Argentina.** *Teeth* in the jaws and on the tongue: *gill-membrane* 8-rayed: *vent* near the tail: *ventral-fins* many rayed.

29. **Atherina.** *Upper-jaw* a little flattened: *gill-membrane* 6-rayed: *body* marked on the sides with a silvery stripe.

30. **Mugil.** *Lips* membranaceous, the lower-one carinate within: *teeth* minute: *mouth* with an inflected callosity at the corners: *gill-membrane* with 6 curved rays; the covers smooth and rounded: *body* fleshy, with large scales: *dorsal-fins* two.

31. **Exocœtus.** *Head* scaly: *mouth* without teeth; the jaws conneeted on each side: *gill-membrane* 10-rayed: *belly* angular: *pectoral-fins* very large and long, giving the power of flight.

32. **Clupea.** *Head* compressed: *mouth* rough within: *upper-mandible* with the side-plates serrate: *gill-membrane* 8-rayed, the covers of 3 or 4 pieces; gills internally setaceous: *lateral-line* near and parallel with the back: *belly* sharp, and generally serrate: *ventral-fins* about 9-rayed: *tail* forked.

33. **Cyprinus.** *Mouth* small, without teeth; *teeth* in the throat: *gill-membrane* 3-rayed: *ventral-fins* mostly 9-rayed.

ORDER V. CARTILAGINEI.

Fishes with a cartilaginous sceleton.

34. **Petromyzon.** *Body* eel-shaped: *mouth* placed underneath, with numerous teeth in circular rows: *spiracles* 7 on each side the neck, and one on the nape: *pectoral* and *ventrat-fins* none.

35. **Gastobranchus.** *Body* eel-shaped: *mouth* placed underneath, bearded with numerous pectinate teeth: *spiracles* 2, beneath the belly.

36. **Raja.** *Mouth* placed underneath, transverse, armed with teeth: *spiracles* 5 each side, placed obliquely and beneath near the neck: *body* thin, flat, more or less rhombic.

37. **Squalus.** *Mouth* placed underneath the anterior part of the head, armed with numerous teeth disposed in rows: *spiracles* 4-7, semilunar, on the sides of the neck; *body* oblong, more or less cylindrical.

38. **Chimæra.** *Head* pointed: *spiracle* solitary, 4-parted, under the neck: *mouth* placed beneath, with the upper-lip 5-cleft: *cutting-teeth* 2 in front, both above and below.

39. **Acipenser.** *Snout* bearded underneath: *mouth* placed beneath the head, oval, retractile, without teeth: aperture of the *gills* on the sides of the head: *body* elongated, mailed above by bony tubercles.

40. **Lophius.** *Head* depressed: *teeth* sharp, numerous: *tongue* broad, armed with teeth: *gills* 3, with a lateral simple aperture: *pectoral-fins* broad, more or less resembling feet; *dorsal* and *anal* opposite, and near the tail: *vent* in the middle of the body.

41. **Cyclopterus.** *Head* obtuse: *mouth* placed in front: *teeth* in the jaws: tongue short, thick; *gill-membrane* 4-rayed, the cover of one piece: *body* thick, without scales: *ventral-fins* united into a circle, forming an instrument of adhesion.

42. **Cephalus.** *Jaws* bony: aperture of the *gills* linear or oval: *body* terminating abruptly, so as to resemble the head of a fish cut off.

43. **Tetrodon.** *Jaws* bony, divided at the tip: aperture of the *gills* linear: *body* rough with prickles underneath: *ventral-fins* none.

44. **Syngnathus.** *Snout* long, cylindrical, with the mouth at the end, furnished with a lid: *gill-covers* large, striate, closed: *spiracle* tubular, on the nape: *body* elongated, jointed, mailed: *ventral-fins* none.

45. **Centriscus.** *Snout* long, without lid: *mouth* without teeth: aperture of the *gills* repand: *body* compressed, carinate along the belly: *ventral-fins* united.

ORDER I. APODES. *APODAL.*

1. ANGUILLA. *Eel.*

1. **A. *vulgaris*. Olive-brown, more or less silvery underneath : lower-jaw longer than the upper.**

Common Eel. *Shaw Zool.* iv. *p.* 15. *tab.* 1.

Body in stagnant waters blackish, yellowish beneath, ſometimes varied with brown lines, very slippery : *head* ſmall, narrowed on the forepart : *nostrils* ſmall, round, with another lengthened one beneath each eye : *teeth* ſmall, sharp, numerous : *iris* golden, pupil blackish : aperture of the *gills* ſemilunar : *jaws* with ſeveral minute pores each side : *trunk* a little compressed : *lateral-line* straight : *skin* covered with ſoft oblong ſcales : *pectoral-fins* ſmall, oval, paler, with about 19 rays : *dorsal, caudal,* and *anal* united.

2. **A. *Conger*. Brown, silvery beneath : lateral line speckled with white : lower-jaw rather shorter than the upper.**

Conger Eel. *Shaw Zool.* iv. *t.* 1. *Will. ichth. t. G.* 6.

Much reſembles the last, except in being of a larger size, ſometimes growing to 10 feet long and weighing 100 pounds and upwards : *body* with whitish patches on the sides : *lateral-line* broad : *iris* silvery : edges of the *dorsal* and *anal* fins black : *pectoral-fins* 19 rayed.

3. **A. *Myrus*. Dusky, with elongated snout: fin surrounding the body whitish edged with black.**

Rondeletian Eel. *Arted. Gen.* 24. *syn.* 40.

Head narrowed on the fore-part : *sides* marked with a few yellow specks : *upper-lip* with 2 short tentacula : each side the *neck* a branchial orifice.

2. OPHIS. *Sea Serpent.*

4. **O. *maculata*. Silvery, with dark-brown spots.**

Spotted Sea Serpent. *Shaw Zool.* iv. *p.* 22. *tab.* 2. *Bloch t.* 154.

Body 3 or 4 feet long, slender, silvery-white with a triple row of dark-brown oblong ſpots : *head* slender : *eyes* moderate : *mouth* wide: *teeth* curved inwards : *pectoral-fins* ſmall, white : *tail* naked, round, pointed. *Berkenhout.*

3. ANARICHAS. *Wolf-fish.*

5. **A. *Lupus*. Livid brown, with transverse darker bands.**

Ravenous Wolf-fish. *Brit. Zool.* iii. *t.* 24. *Donovan's Fishes, t.* 24.

Body 4-7 feet long, tapering, compressed : *head* strong, sloping ; *mouth* wide : *teeth* 5 or 6 in each jaw, conical, and standing far out, with lesser-ones within them ; grinders cloſe to the canine teeth in the upper-jaw, but detached in the lower : *eyes* oblong, *iris* silvery, pupil black : *skin* slippery : *vent* large, nearer the head : *pectoral-fin* 18-rayed : *dorsal* reaching from the hind-part of the head nearly to the tail, 73-rayed ; *anal* extending as far as the dorsal, 46-rayed : *tail* rounded of 13-18 rays.

4. AMMODITES. *Launce.*

6. **Ammodites *Tobianus*.**

Sand Launce. *Br. Zool.* iii. *t.* 25. *Donovan's Fishes t.* 32.

Body 9 or 10 inches long, slender, ſquare, rounded at the sides : *lower-jaw* longer than the upper : *throat* with 2 oblong rough bones: *eyes* ſmall, iris silvery, pupil black : *gill-cover* silvery, of 4 pieces ;

nostrils double, between the eyes and mouth: *back* blue varied with green, with a furrow for receiving the dorſal fin: *sides* and *belly* silvery; *lateral-line* straight, with another above and below it: *dorsal-fin* nearly as long as the back, of 58 ſoft rays: *pectoral-fin* ſmall, 12-rayed: *vent* near the tail, with a brown ſpot near it: *anal-fin* reaching from the vent to the tail, 28-rayed: *tail* slightly forked, with rounded lobes, 16-rayed.

5. OPHIDIUM.

7. **O. *barbatum*. Lower-jaw with 2 long bifid cirri.**

Bearded Ophidium. *Shaw Zool.* iv. *p.* 68. *tab.* 7.

Body whitish, with a dusky tinge above, reddish beneath, covered with ſmall dusky ſpecks, long, thickish, covered with ſmall ſcales: *head* ſmall, without ſcales: *upper-jaw* rather longer: *lips* thick: *teeth* ſmall: *iris* golden with a tranſparent nictitant membrane, pupil black: *lateral-line* brown, straight: *vent* nearer the head: *pectoral-fins* ſmall, brown at the baſe, edged with grey: *dorsal-fin* beginning above the middle of the back, united with the caudal and anal, narrow, white edged with black: *tail* pointed.

8. **O. *imberbe*. Jaws without cirri: tail rather obtuse.**

Beardleſs Ophidium. *Br. Zool.* iii. *app. tab.* 93.

Body oblong, slender: *head* a little compressed, rounded: *upper-jaw* rather longer: *iris* broad, silvery: *gill-covers* angular on the upper-part, with a strong sharp point over the valve: *lateral-line* near the back: *vent* nearly in the middle: *pectoral-fins* rather large, lanceolate; the rest all united, the ventral one as long as the dorſal.

6. LEPTOCEPHALUS. *Morris.*

9. **Leptocephalus *Morissii*.**

Angleſea Morris. *Br. Zool.* iii. *t.* 25. *Shaw Zool.* iv. *t.* 10.

Body about 4 inches long, flat, thin, nearly tranſparent, growing slenderer towards the tail and pointed: *eyes* large: *teeth* very ſmall, in both jaws: *lateral-line* straight, decussate with oblique striæ: aperture of the *gills* large: *pectoral*, *ventral*, *caudal-fins* none; *dorſal-fin* low, thin, extending the whole length of the back to near the tail: *anal-fin* reaching to near the tail: *tail* pointed.

7. XIPHIAS. *Sword-fish.*

10. **X. *Gladius*. Dorsal-fin falcate, tapering behind.**

Common Sword-fish. *Br. Zool.* iii. *t.* 26. *Shaw Zool.* iv. *t.* 14,

Body growing to 20 feet long, round, taper: *head* flattish, sloping, steel-blue: *jaws* both pointed; the upper-one 4 times as long as the lower, flattish above and beneath, acute at the sides, with a furrow down the middle: *nostrils* double, near the eyes: aperture of the *gills* large, the cover of 2 pieces: *back* bluish-black: *sides* and *belly* silvery white: *lateral-line* a ſeries of black ſpecks: *dorsal-fin* brown, ſuddenly sloping, arched, with an elevated proceſs near the tail, 42-rayed: *pectoral* yellowish, 17-rayed: *anal* falcate, cinereous, 18-rayed: *tail* ſemilunar, with a fin-like proceſs each side before it.

ORDER II. JUGULARES. *JUGULAR.*

8. CALLIONYMUS. *Dragonet.*

11. **C *Lyra*. First ray of the first dorsal fin as long as the body.**

Gemmeous Dragonet. *Br. Zool.* iii. *t.* 27. *Donov. Fish. t.* 9.

Body about a foot long, variegated rich blue yellow and white: *head* oblong, broad, above convex and brown, beneath flat, ſpotted with blue at the sides: *throat* black: *eyes* approximate, vertical, oblong; pupil dark blue: aperture of the *gills* narrow, tubular, the cover of one piece, with a 3-forked ſpine at the end: *back* straight, brown, yellow at the sides, white towards the belly with 2 interrupted blue lines: *lateral-line* straight: *vent* near the middle of the body: first *dorsal-fin* 4-rayed, the first ray arched and very long ſecond 10-rayed: *pectoral-fins* brown, 18-rayed: *ventral* 5-rayed; *anal* blue; 10-rayed: *caudal* long, round, 10-rayed.

12. **C. *Dracunculus*. First ray of the first dorsal fin shorter than the body.**

Sordid Dragonet. *Br. Zool.* iii. *t.* 28. *Donov. t.* 84.

Body 6 inches and a half long, taper, dirty yellow with white and dusky ſpots, white on the belly: *head* broad, compressed, sloping: *eyes* large, oval, vertical; iris reddish, pupil black: upper-jaw longer: *back* longitudinally grooved, with 4 perforations before the first fin: *lateral-line* hardly visible: *vent* nearer the head: first *dorsal-fin* white before, black behind, 4-rayed; ſecond yellowish with paler lines, 10-rayed; *pectoral* light-brown, 16-rayed; *ventral* broad, 5-rayed; *anal* 10-rayed: *tail* rounded, long, 8-rayed.

9. TRACHINUS. *Weever, Stingbull.*

13. **Tr. *Draco*. Silvery, with oblique transverse yellowish bands: first dorsal-fin 5-rayed, black.**

Common Weever. *Br. Zool.* iii. *t.* 28, 29. *Donovan t.* 23.

Body 10 or 12 inches long, elongated, compressed, covered with ſmall deciduous ſcales, with a dusky tinge on the upper parts: *under-jaw* longer, sloping much towards the throat: *mouth* large, oblique: *eyes* vertical, iris yellow, pupil black: aperture of the *gills* large, the covers tipt with a strong ſpine: *back* straight, yellow-brown: *lateral-line* straight: first *dorsal-fin* armed with strong ſpines, lodged when cloſed in a hollow of the back; ſecond reaching almoſt to the tail, 25-rayed: *pectoral* 15-rayed: *ventral* 6-rayed: *anal* 25-rayed: *tail* rather rounded, 24-rayed.

10. GADUS. *Codfish.*

A. With 3 dorsal fins: mouth bearded.

14. **G. *Morhua*. Cinereous, with yellowish spots: jaws and tail nearly even: first anal ray spinous.**

Common Cod. *Shaw Zool.* iv. *t.* 22. *Jonst. pisc.* 8. *t.* 2. *f.* 1.

Body generally 2 or 3 feet long, taper, with a prominent belly: *mouth* large: *jaws* nearly equal, the lower-one with a single beard: *scales* rather large: *lateral-line* broad, whitish, straight till it reaches the vent: *vent* nearer the head: first *dorsal-fin* with 14 rays, ſecond 19, third 21: *pectoral* 18: *ventral* 6-rayed: first *anal-fin* with 20 rays, ſecond 16: *tail* 44-rayed, the first on each side short and bony.

15. **G. *Æglefinus*. Whitish, tail forked: upper-jaw longer: beyond the pectoral-fins a large black spot.**

Haddock. *Donovan's Fishes, t.* 59. *Bloch t.* 62.

Body hardly 2 feet long: *head* sloping: *eyes* large; iris silvery, pupil black: *mouth* narrow: *lower-jaw* with a single beard: *scales* small, firm: *lateral-line* nearer the back, black: *back* with a dusky cast: *fins* bluish, first *dorsal* with 16 rays, ſecond 20, third 19; *pectoral* 19-rayed; *ventral* 6: *anal* 21, 22; *caudal* 27-rayed.

16. **G. *Callarias*. Cinereous, beneath white: head and body spotted with brown: tail forked: upper-jaw longer.**

Dorſe. *Bloch t.* 63. *Ionst. piſc. t.* 46. *f.* 4.

Body leſs than the last; *head* ſmaller, marked with ſeveral ſpots which are brown in the ſummer and black in the winter: *scales* ſmall, ſoft: *iris* pale yellow, pupil black: *body* ſometimes with a reddish cast, and the ſpots orange in the young fish: *lower-jaw* with a single beard: *lateral-line* nearer the back, broad, curved, ſpotted: *dorsal-fins* 15, 16, 18-rayed; *pectoral* 17; *ventral* 6; *anal* 18, 17; *caudal* 26-rayed.

17. G. *Luscus*. Back olive, sides yellowish: first ray of the ventral fins long, setaceous: tail bordered with black.

Bib. *Brit. Zool.* iii. *t.* 30. *Donovan Fish. t.* 19.

Body about a foot long, white beneath, prominent on the back and belly: *ſcales* larger, deciduous: *chin* with a single beard: *anal-fin* dusky edged with white: *dorſal-fins* 12, 20, 10-rayed; *pectoral* 16; *ventral* 6; *anal* 13, 18; *tail* 17-rayed.

18. G. *punctatus*. Pale brown with golden spots, beneath white thickly covered with minute dusky specks: upper-jaw longer.

Speckled Cod. Taken frequently in the Weirs at Swanſea.

Body 18 inches long, slightly arched on the back, a little prominent on the belly, covered above with numerous gold-yellow roundish ſpots, beneath with dusky ſpecks which are stellate under a glaſs: *head* large, gradually sloping: *teeth* ſmall, in ſeveral rows in the upper-jaw, in the lower a single row: *nostrils* double: *iris* reddish, pupil black: *chin* with a single beard: *nape* with a deep longitudinal groove: *lateral-line* nearer the back, curved as far as the middle of the ſecond dorſal-fin, growing broader and whiter towards the end: *upper-fins* and *tail* brown, with obſcure yellowish ſpots, and darker towards the ends; lower-ones tinged with green: *vent* near the middle of the body: *scales* ſmall, all of them under a glaſs minutely ſpeckled with brown: gill-covers of 2 pieces: *lower-jaw* with 5 obſcure punctures each side: *dorsal-fins* 14, 20, 18-rayed; *pectoral* 18: *ventral* 6, the first ray shorter than the ſecond and divided a little way down; *anal* 19, 16; *tail* even, 36-rayed.

Differs from G. Morhua in not having the first anal ray ſpinous, and in the lower-jaw being considerably longer; from G. Luſcus in the first ray of the ventral-fin being shorter than the ſecond; from G. barbatus in wanting the 7 distinct punctures on the lower-jaw, in its ſmall ſcales, and in the first dorſal-fin not ending in a long fibre; and from G. Callarias in not being spotted with brown, and in having the lateral-line white.

19. G. *barbatus*. White, with brownish back and fins: lower-jaw with 7 punctures each side.

Whiting-pout. *Bloch t.* 166. *Br. Zool.* iii. *p.* 183.

Body about a foot long, much arched and carinate on the back: *gill-cover* of many pieces: *lateral-line* broad, white, crooked: first *dorsal-fin* triangular, ending in a long fibre: *pectoral-fins* with a dusky ſpot at the bottom: *vent* nearer the head: *dorſal-fins* 12, 20, 20-rayed; *pectoral* 18: *ventral* 6; *anal* 19, 19; *tail* 40-rayed.

20. G. *minutus*. Silvery, with the back brownish: upper-jaw longer: each side the lower-jaw 9 punctures: vent in the middle of the body.

Poor. *Br. Zool.* iii. *t.* 30. *Bloch t,* 67. *f.* 1.

Body about 6 inches long, with dusky ſpots on the sides; *head* rather sharp: *iris* silvery, pupil black: *lower-jaw* with a single beard: *lateral-line* straight, narrow: *tail* a little forked: *belly* black within: *dorſal-fins* 12, 19, 17-rayed; *pectoral* 13; *ventral* 6; *anal* 27, 17; *caudal* 18-rayed.

B. *With 3 dorsal fins: jaws beardless.*

21. **G. *Merlangus*. Silvery, above brownish with yellow spots: at the base of the pectoral fins a black spot: upper-jaw longer.**

Whiting. *Donovan's Fishes t.* 36. *Bloch t.* 65.

Body about a foot long, taper, clothed with ſmall round thin ſcales: *head* narrowed in front: *teeth* in the upper-jaw numerous, the fore ones long; in the lower-jaw a single row: *lower-jaw* with 9 or 10 punctures each side: *lateral-line* nearly straight, yellow: *dorsal-fins* white, 14, 18, 20-rayed; *pectoral* blackish, 20-rayed; *ventral* white; *anal* edged with white, 30, 20; *tail* blackish, a little forked, 31-rayed.

22. **G. *Carbonarius*. Blackish, beneath silvery-white: lower-jaw longer: lateral-line straight white.**

Coal-fish. *Donovan's Fishes* t. 13. *Br. Zool.* iii. *t.* 31.

Body above 2 feet long, covered with thin oblong ſcales: *head* narrow, pointed: *iris* yellow with a black ſpot: *mouth* black within: *tongue* silvery: *fins* black, lower-part of the ventral and anal white: *tail* forked: *dorsal-fins* 14, 20, 22-rayed; *pectoral* 18; *ventral* 6; *anal* 22, 19; *caudal* 26-rayed.

23. **G. *Pollachius*. Rather silvery, with brown back and fins: lower-jaw longer: lateral-line curved, black.**

Pollack. *Donovan's Fishes*, *t.* 7. *Bloch t.* 68.

Body about 18 inches long, above dusky-brown, gradually whitening towards the belly, marked with yellow lines beneath the lateral line: *head* narrowed in front: *eyes* large, pupil black, iris yellow ſpotted with black: *scales* ſmall, thin, oblong, edged with yellow; *dorsal-fins* 12, 19, 15-rayed; *pectoral* 19; *ventral* 6; *anal* 23, 16: *tail* slightly forked, 42-rayed.

C. *With two dorsal fins.*

24. **G. *Merluccius*. Whitish, greyish on the back: mouth beardless: lower-jaw longer.**

Hake. *Donovan's Fishes t.* 28. *Bloch t.* 154.

Body one and a half to 2 feet long, elongated: *head* large, broad and flattish, compressed: *jaws* with a double row of sharp teeth, and a single row each side on the palate: near the *eyes* 4 ſmall perforations: *lateral-line* straight nearer the back, beginning with ſeveral ſmall tubercles near the head: *vent* nearer the head: first *dorsal-fin*, *pectoral* and *ventral* pointed: *tail* even: *dorſal-fins* 9, 38-rayed; *pectoral* 15; *ventral* 8; *anal* 36; *caudal* 18-rayed.

25. **G. *Molva*. Grey, beneath whitish: mouth bearded: upper-jaw longer: tail rounded, with a dusky bar.**

Ling. *Shaw Zool.* iv. *t.* 23. *Bloch t.* 69.

Body 3 or 4 feet long, slender, roundish, covered with thin oblong ſcales: *head* flat: *iris* white, pupil black: *chin* with a ſmall beard: *tongue* white, thin, pointed: *lateral-line* straight: *fins* edged with white, all blackish except the ventral which are white: *dersal-fins* 15, 65-rayed; *pectoral* 15; *ventral* 6; *anal* 67; *caudal* 40-rayed.

26. **G. *Lota*. Yellowish-olive, variegated with black: mouth bearded: jaws equal: tail rather oval**

Burbot. *Shaw Zool.* iv. *t.* 23. *Donovan t.* 92.

Body growing to 3 feet long, slender, roundish, covered with minute soft thin ſcales: *head* broad, flattened: *eyes* ſmall, lateral: iris yellow, pupil blue: *chin* with a beard or two, and 3 on the noſe: *tongue* broad, brownish-yellow: *lateral-line* straight: *vent* in the middle of the body: *dorsal-fins* 11, 61-rayed; *pectoral* 16; *ventral* 6; *anal* 50; *caudal* 35-rayed.

27. G. *Mustela.* Olive-brown, beneath whitish : mouth with 4 beards on the upper-jaw, and 1 on the lower : first dorsal-fin obsolete, lodged in a furrow, with a cirrus before it.

Five-bearded Cod. *Brit. Zool.* iii. *t.* 33. *Donovan's Fishes t.* 14.

Body about 19 inches long, with a yellowish tinge above, covered with mucus and very ſmall ſcales : *head* ſmall, silvery with a violet tinge : *iris* golden, pupil black : *mouth* large ; upper-jaw longer : *lateral-line* obſolete : *tail* rounded : *dorsal-fins* 1, 42-rayed : *pectoral* 14 ; *ventral* 7 ; *anal* 40 ; *caudal* 25-rayed.

28. G. *tricirratus.* Reddish-yellow with dark-brown spots: mouth with 2 beards on the upper-jaw and 1 on the lower : first dorsal-fin obsolete, lodged in a furrow, without the cirrus before it.

Three-bearded Cod, Rockling. *Brit. Zool. t.* 33. *Donovan t.* 2.

Body long, slender, compressed : *teeth* numerous, ſmall, diſpoſed along the jaws in the form of a broad plate : *palate* with a triangular ſet of ſmall teeth ; *fins* all ſpotted, the ventral reddish : *lateral-line* bent till the middle of the body : *dorsal-fins* 1, 56 ; *pectoral* 18 ; *ventral* 6 ; *anal* 46 ; *caudal* 20 rayed.

D. *With a single dorsal-fin.*

29. G. *Brosme.* Lower-jaw with a single beard : ventral-fins fleshy, ending in 5 cirri : tail rounded, and with the dorsal and anal fins edged with white.

Torsk. *Br Zool. t.* 34. *Donovan's Fishes t.* 70.

Body about 25 inches long, above yellow-olive, beneath white, a little compressed, prominent on the belly ; *head* dusky, with a deep furrow reaching to the dorſal-fin which is rounded on the fore-part : *lateral-line* curved, whitish : *vent* in the middle of the body : *dorsal, anal,* and *caudal-fins* ſpotted : *pectoral* ſmall, yellow, rounded : *dorsal-fin* 49-rayed ; *pectoral* 21 ; *ventral* 5 ; *anal* 37 ; *caudal* 35-rayed.

11. BLENNIUS. *Blenny.*

30. B. *Gattorugine.* Whitish, with transverse brown undulations : over each eye and on the nape a palmate cirrus.

Gattorugine. *Br. Zool.* iii. *t.* 35. *Donovan t,* 86.

Body 8-10 inches long, compressed : *eyes* vertical, prominent ; iris reddish, pupil black : *teeth* ſmall, cloſe-ſet : palate ſmooth : on the *head* 2 pair of branched membranes : *nostrils* near the eyes : *gill-cover* of one piece : *lateral-line* straight, nearer the back : *vent* nearer the head : *dorsal-fin* with generally a few black ſpots, the first 16 rays ſpinous, the hindmost very long : *dorsal-fin* 32-rayed ; *pectoral* 13 ; *ventral* 2 ; *anal* 20 ; *caudal* 12-rayed.

31. B. *Galerita.* Yellowish-brown, speckled with black : between the eyes a transverse triangular crest edged with red.

Crested Blenny. *Br. Zool.* iii. *t.* 35.

Body 4 or 5 inches long, compressed, slender, slippery : *head* furnished with a skinny appendage which may be raiſed or depressed, and between the eyes a triangular prominence pointing backwards : *vent* behind the pectoral fins : *dorſal-fin* shallow, reaching from the head nearly to the tail, 60-rayed, of which 50 are spinous ; *pectoral* 10 ; *ventral* ſmall, short, 2 ; *anal* 36 ; *tail* rounded, 16-rayed.

32. B. *Phycis*. Grey-brown, with the nostrils slightly crested : lower-lip with a cirrus : back with 2 fins.

Hake Blenny. Forked Hake. *Br. Zool.* iii. *p.* 193. *n.* 82.

2. Body about half the size, black, ſmooth.

Body about a foot long : *palate* with a triangular bed of ſmall teeth : *lateral-line* curved : *vent* in the middle of the body : *dorſal-fins* 10, 61-rayed, the first triangular with the first ray long and slender, ſecond commencing just behind the first and reaching nearly to the tail ; *pectoral* 15 ; *ventral* 2-rayed, joined at the bottom and forked towards the end ; *anal* 57 ; *tail* rounded, 30-rayed.

33. B. *trifurcatus*. Brown, with white lips : ventral-fins of 3 distinct cirri

Trifurcated Blenny. *Br. Zool.* iii. *p.* 196. t. 32.

Body about a foot long, deep brown, except the foldings of the lips which are ſnowy ; compressed from the pectoral-fins, and ſuddenly tapering to the tail : *lower-jaw* with a ſmall beard : *head* broad, depressed : *eyes* large, iris yellowish : *palate* with a ſemilunar row of ſmall curved teeth : *tongue* none : *back* with a cavity at the beginning, in which is the rudiment of the first dorſal-fin; ſecond *dorsal-fin* reaching to the tail, the *anal* correſponding : above the *pectoral-fin* each side a row of tubercles, from which commences the *lateral-line* which is abruptly curved in the middle : *tail* rounded.

34. B. *Pholis*. Olive-green, marbled with blackish and whitish clouds : lateral-line curved sub-bifid.

Smooth Blenny. *Brit. Zool.* iii. *t.* 36. *Donovan t,* 78.

Body 7 or 8 inches long, olive, dark-brown or green, variously clouded, with orange fins : *head* thick : *mouth* large : *jaws* armed with a row of sharp teeth, the upper-one longer : *lips* whitish : *nostrils* with 4 fibres : *eyes* large, iris red, pupil black : *tongue* ſmooth : *palate* rough : *vent* nearer the head : *dorſal-fin* long, appearing as if divided in the middle, 31-rayed ; *pectoral* rounded, 12 ; *ventral* divided at the end, 2 ; *anal* 20, the ends of the rays pure white ; *tail* rounded, 13-rayed,

35. B. *Gunnelus*. Yellowish-brown, with deeper specks ; dorsal-fin with about 10 round black spots, each surrounded with a paler ring.

Spotted Blenny. *Brit. Zool.* iii. *t.* 35. *Donovan Fishes t.* 27.

Body 8 or 9 inches long, slender, much compressed, white beneath : *head* ſmall : *mouth* sloping obliquely downwards : *lower-jaw* longer : *iris* white, pupil black : *lateral-line* straight, obſolete : *vent* nearer the head : *dorsal-fin* nearly as long as the body, with 9-12 ocellate ſpots, 77-rayed ; *pectoral* ſmall, 12 ; *ventral* 2 ; *anal* orange, ſpotted with brown at the baſe, 43 ; *tail* yellow, rounded, 16-rayed.

36. B, *viviparus*. Olive, with dusky bars down the sides, beneath white : nostrils tubular : dorsal caudal and anal-fins united.

Viviparous Blenny. *Br. Zool.* iii. *t.* 37. *Donovan t.* 34.

Body about 12 inches long, taper, yellowish-olive with dusky bars acroſs the back, covered with minute oblong white ſcales edged with black : *head* ſmall : *upper-jaw* longer : *vent* nearer the head : *lateral-line* straight, obſolete : *throat* yellow : *dorſal-fin* with a deep indenture near the tail, 92-rayed ; *pectoral* yellow, 48 ; *ventral* 2 ; *anal* yellow 68; *caudal* 48-rayed.

ORDER III. THORACICI. *THORACIC.*

12. CEPOLA. *Band-fish.*

37. *C. rubescens.* Pale red, with silvery undulate tranverse lines: tail lanceolate.

Red-Bandfish. *Montague Linn. Trans.* vii. *p.* 291. *tab.* 17.

Body 10 inches long, tapering to a point: *head* not larger than the body: *jaws* armed with a row of distant curved teeth: *eyes* large, iris silvery mixed with crimſon, pupil blue-black: *gill-covers* silvery, of 2 pieces, the membrane 4-rayed: *dorsal, caudal,* and *anal fins* united, reaching nearly all round the body; *pectoral,* rounded, 16-rayed; *ventral* whitish, cloſe together, rather before the pectoral, oval, 6-rayed, the first ray spinous with a filament before them longer than the rays: *lateral-line* a little curved near the head: *vent* near the breast.

13. ECHINEIS. *Sucking-fish.*

38. *E. Remora.* Dusky-brown, with about 18 bars on the shield: tail slightly forked.

European Sucking-fish. *Shaw Zool.* iv. *p.* 201. *t.* 31.

Taken by the Author, in Swanſea, from the back of a Cod-fish, in the ſummer of 1806.

Body 12 or 14 inches long, without ſcales, marked with numerous impreſſed dots; *head* rounded in front, *jaws* with numerous sharp teeth, the lower-one longer: *shield* margined, divided down the middle, with 16-19 more or leſs curved grooves armed with 2 or 3 rows of ſmall ſpines: *tongue* and *palate* beſet with ſmall teeth: near the *upper-lip* are 2 pores each side: aperture of the *gills* large, the cover of one piece: *lateral-line* bent at the end of the pectoral-fin: *vent* nearer the tail: *dorsal-fin* 22-rayed; *pectoral* 22; *ventral* 4; *anal* 20; *tail* ſemilunar, 20-rayed.

14. GOBIUS. *Goby.*

39. *G. niger.* Variegated whitish and brown: second dorsal-fin with about 14 rays.

Black Goby. *Br. Zool.* iii. *t.* 38. *Shaw Zool.* iv. *t.* 34.

Body 5 or 6 inches long, covered with hard grey ſcales, ſoft, mucous; *jaws* equal, with the teeth in 2 rows: *cheeks* inflated: from the *head* to the first dorſal-fin a ſmall cavity: *dorsal* and *anal-fins* pale blue ſpeckled with black: *belly* yellowish: *lateral line* obſolete: *vent* in the middle of the body: *dorſal-fins* 6, 14-rayed: *pectoral* 16 or 17, the middle-ray longest: *ventral* united in a ſort of funnel 12; *anal* 15; *tail* rounded, 17-rayed.

40. *G. minutus.* Whitish, with ferruginous spots: eyes blue: fins with obscure ferruginous streaks.

Spotted Goby *Donovan's British Fishes, tab.* 28.

Body about 3 inches long: *head* depressed: *tongue* large: *teeth* in both jaws: *eyes* large, prominent; iris ſapphirine-blue: *dorſal-fins* remote, 6, 11-rayed; *pectoral* 20: *ventral* 19; *anal* 11; *tail* even, 16-rayed.

15. COTTUS. *Bullhead.*

41. C. *Gobio.* Smooth, yellowish-olive, spotted with black, beneath whitish: gill-covers each with 2 curved spines.

River Bullhead. Miller's Thumb. *Br. Zool. t.* 39. *Donov. t.* 80.

Body 5 or 6 inches long, taper: *head* very large: *eyes* ſmall, in the middle of the head, iris yellowish, pupil black: *jaws* equal;

teeth in the jaws and palate : *tongue* looſe, ſmooth : *gill-cover* of one piece : *lateral-line* in the middle : *vent* about the middle of the body: *fins* variegated with brown : *dorsal-fins* 8, 17-rayed ; *pectoral* 11 : *ventral* 4 ; *anal* 12 ; *tail* rounded, 12-rayed.

42. C. *Scorpius.* Brown, variegated with white: head armed with several spines : upper-jaw rather longer.

Father Lasher, *Br. Zool.* iii. *t.* 40. *Donovan t.* 35.

Body 9 or 10 inches long, taper, covered with minute tubercles: *head* with numerous large sharp ſpines, and 2 oblong ſoft ones before the eyes : *eyes* large, vertical, iris pale yellow, pupil black : *mouth* and *palate* armed with teeth : *gill-cover* of 2 pieces : *fins* with a reddish tinge, barred with deep brown ; *lateral-line* straight, nearer the back : *vent* in the middle of the body : *dorsal-fins* 8, 14-rayed ; *pectoral* scalloped, 9 ; *ventral* 3 ; *anal* 11 ; *tail* even, 14-rayed.

43. C. *cataphractus.* Brown, beneath whitish : body mailed : snout with 2 cloven tubercles : lower-jaw and throat bearded.

Armed Bullhead, Pogge. *Br. Zool. t.* 39. *Donovan t.* 16.

Body about 5 inches long, covered with strong bony crusts, divided into pieces, the ends of which project into a sharp point forming prickly lines down the back and sides : *back* with 3 or 4 dusky ſpots : *head* large, bony, rugged : *lateral-line* straight, in the middle : *vent* nearer the head : *dorſal-fins* 5, 7-rayed ; *pectoral* 18 ; *ventral* 3 ; *anal* 6 ; *tail* rounded, 10-rayed.

16. ZEUS. *Doree.*

44. Z. *Faber.* Tail rounded : sides marked with an oval dusky spot in the middle : dorsal and anal-fins 2.

John Doree. *Br. Zool.* iii. *t.* 41. *Donovan t.* 8. *Shaw t.* 41.

Body ſometimes a foot or more long, dusky green, with a gilded tinge, and blue and white variations : *head* deformed, with a large projectile ſnout, and a deep cavity before the eyes : *gill-covers* of 2 pieces : *chin* and *shoulders* with 2 ſpines : *back* and *belly* ſerrate with ſpines : *lateral-line* curved : first *dorsal-fin* with ſpinous rays which end in long filaments : *dorſal-fins* 10, 24-rayed ; *pectoral* rounded, 14 ; *ventral* 7 ; *anal* 4, 22 ; *tail* rounded, 14-rayed.

45. Z. *Luna.* Tail lunate : body red, green, or purple, with oval white spots : dorsal and anal-fins solitary.

Opah, King-fish. *Br. Zool. t.* 42. *Sow. t.* 22. *Donov. t.* 97.

Body about 3 feet long, very deep from the back to the chest, and ſuddenly tapering to the tail : *head* short, rounded : *back* and *sides* silvery green blue or gold, with silver or gold ſpots, without ſcales: *tongue* thick, rough with prickles pointing backwards : *fins* ſcarlet, the *dorsal* and *anal* ones falcate, *pectoral* and *ventral* pointed : *tail* creſcent-shaped.

17. PLEURONECTES. *Flat-fish.*

A. *Eyes both on the right side of the head.*

46. Pl. *Hippoglossus.* Body perfectly smooth, elongated, brown above, white beneath : tail lunate.

Holibut. *Donovan's Fishes t.* 75. *Bloch t.* 47.

Body ſometimes growing to 3 or 400 pounds weight, of a more lengthened form than most of the flat-fish : *eyes* large, very rarely placed on the left side of the head, iris white, pupil black : *teeth* long, curved, sharp, distant : *lateral-line* arched over the pectoral-fins : before the *anal-fin* a long ſpine : *tail* covered with ſcales at the baſe: *dorsal-fin* 101-rayed; *pectoral* 14; *ventral* 5; *anal* 73; *caudal* 17-rayed.

47. Pl. *Plateſsa.* Smooth, browniſh with round fulvous ſpots: head with a row of 6 tubercles reaching to the lateral-line.

Plaise. *Donovan's Fishes t.* 6. *Shaw Zool.* iv. *t.* 43.

Body growing to 15 or 16 pounds weight, clothed with thin ſoft ſcales, and marked with numerous dark orange ſpots: *head* covered with firm ſcales, each placed in its proper bed: *mouth* ſmall, lower-jaw longer: *teeth* ſmall, obtuſe: *lateral-line* ſtraight, in the middle: *anal-fin* with a large ſpine before it: *tail* rounded; ſcaly at the baſe, the rays longer than the membrane; *dorsal-fin* 72-rayed; *pectoral* 10; *ventral* 5; *anal* 54; *caudal* 18-rayed.

48. Pl. *Limanda.* Browniſh, with rough ſcales: lateral-line arched over the pectoral fin.

Dab. *Donovan's Fishes t.* 44. *Bloch t.* 46.

Body 3 or 4 pounds weight, with ſoft oblong ſcales, pale brown, beneath white: *head* ſmall: *eyes* large: *dorsal-fin* 73-rayed; *pectoral* 11; *ventral* 6; *anal* 53; *tail* nearly even, 15 rayed.

49. Pl. *microcephalus.* Dark brown, with rather ſmooth ſcales: head ſmall, mouth diminutive: lateral-line a little curved over the pectoral fin.

Smear-dab. *Donovan's Fishes tab.* 42.

Body above dusky-brown, beneath white, without ſpots: *mouth* very minute, with the lips a little protruded: *fins* yellowiſh-brown; *dorsal* 90-rayed; *pectoral* 7; *ventral* 6; *anal* 73; *tail* rounded, 17-rayed.

50. Pl. *lævis.* Yellowiſh-brown, with quite ſmooth ſcales: beneath white with 5 dusky ſpots.

Smooth Dab. *Br. Zool. n.* 105. *Ray syn. pisc.* 162. *f.* 1.

Body a foot and a half long, 11 inches broad, light brown obſcurely ſpotted with yellow: *head* ſmall: *eyes* near each other: *mouth* filled with ſmall teeth: *lateral-line* much curved over the pectoral fin: *dorsal-fin* 79-rayed.

51. Pl. *Flesus.* Brown, with the lateral-line rough: at the baſe of the fins a ſeries of aſperities.

Flounder. *Bloch t.* 44. *Donovan t.* 94.

Body growing to 5 or 6 pounds weight, covered with thin oblong ſcales, above dull brown with lighter or roſy variations, beneath dirty-white: *mouth* ſmall, the lower-jaw longer: *gill-covers* ending in an obtuſe ſpine; *lateral-line* with a row of ſmall ſpines, curved over the pectoral fin: *fins* mostly ſpotted with black, between the anal and ventral a strong ſpine; *dorsal-fin* 55-rayed; *pectoral* 11; *ventral* 6; *anal* 39; *tail* a little rounded, 18-rayed.

2. Body roſe-colour, with pale yellow-brown fins.

Roſe-coloured Flounder. *Shaw Zool.* iv. *t.* 43*.

Body about 9 inches long, with a ſlight yellowish tinge in ſome parts, in others with silvery white, beneath nearly white, without ſcales, but marked with minute ſcale-like reticulations, and without roughneſs: *lateral-line* nearly ſtraight: *dorsal-fin* 60-rayed; *pectoral* 12; *ventral* 7; *anal* 42; *tail* a little rounded, 20-rayed.

52. Pl. *Solea.* Brown, oblong, with rough ſcales: upper-jaw longer: upper pectoral fin tipt with black.

Sole. *Donovan's Fishes t.* 62. *Bloch t.* 45.

Body ſometimes growing to 2 feet long, above olive-brown, beneath white, covered with ſmall oblong ſcales ending in numerous ſpines: *jaws* bearded with ſmall white cirri, the upper lunate, lower with ſmall moveable teeth: *gill-cover* rounded of one piece: *lateral-line* ſtraight, nearer the back: *vent* nearer the head: *rays* of the dorſal and anal fins covered with ſcales nearly to the middle: *dorſal-fin* 97-rayed; *pectoral* 10: *ventral* 8; *anal* 83; *tail* rounded, 17-rayed.

53. **Pl. *Arnoglossus*. White, transparent, very thin, with small very deciduous scales.**

Smooth Sole. *Pennant Brit. Zool.* iii. *p.* 233. *n.* 108.

B. *Eyes both on the left side of the head.*

54. **Pl. *tuberculatus*. Body nearly circular, grey-brown with blackish variations, rough with horny tubercles.**

Turbot. *Donovan's Fishes t.* 46. *Shaw Zool.* iv. *t.* 45.

Body growing to a large size, covered with obtuſe spinous tubercles: *head* broad, lower-jaw longer: *lateral-line* in the middle, arched over the pectoral-fin: *fins* yellowish, with black marks: *dorsal-fin* 60-rayed; *pectoral* 12; *ventral* 6; *anal* 43; *tail* rounded, 17-rayed.

55. **Pl. *Rhombus*. Rhombic, brown with dusky and white spots, smooth: 4 first rays of the dorsal-fin ramified, with the membrane lacerated between each branch.**

Pearl, Brill. *Sowerby Brit. Miſcel. t.* 50. *Donovan t.* 95.

Body reſembling the Turbot, but is of a ſmaller size, and without the ſpinous tubercles; the ſcales are alſo larger: *dorſal-fin* 71-rayed; *pectoral* 12; *ventral* 6; *anal* 57; *tail* rounded, 16-rayed.

56. **Pl. *Megastoma*. Oblong, livid-brown with black marks: mouth large, the lower-jaw protruded: lateral-line much curved over the pectoral-fin.**

Whiff. *Donovan's Fishes* iii. *tab.* 51.

Body thick, with large rough ſcales: *head* elongated: *tongue* subulate-conic, white: *iris* yellowish, pupil black: *mouth* full of ſmall teeth: *fins* wider in the middle, ſpotted with black; *dorſal-fin* 85-rayed; *pectoral* 13; *ventral* 5; *anal* 61; *tail* rounded, ſcaly at the baſe, 19-rayed.

57. **Pl. *Cyclops*. Brown with dusky ocellate spots: dorsal and anal-fins pointed in the middle: left eye placed in the angle of the head, and visible on both surfaces of the body.**

Cyclops Flounder. *Donovan's Fishes tab.* 90.

Body roundish, ſmooth, brown with dusky ſpots incloſed in a whitish circle: *lateral-line* much curved over the pectoral-fin: middle-rays of the *dorsal* and *anal-fins* longer than the rest, and ending in a point: *left eye* vertical, and visible on the under side of the body: *dorsal-fin* 66-rayed; *pectoral* 11; *ventral* 7; *anal* 52: *tail* rounded, 16-rayed.

18. SPARUS. *Gilthead.*

58. **Sp. *Aurata*. Over the eyes 2 pale semilunar spots edged with gold: behind the head each side a blackish-purple round spot intersected by the lateral line.**

Lunulated Gilthead. *Donovan t.* 89. *Bloch t.* 266.

Body growing to 6 or 8 pounds weight, silvery inclining to red on the back: *iris* silvery: *head* glossed with gold, eſpecially at the lower ſutures of the gill-covers: *tail* with ſometimes a black ſpot near it: *dorsal-fin* 24-rayed; *pectoral* 11; *ventral* 6; *anal* 14; *caudal* 16-rayed.

59. Sp. *Pagrus*, Rose-red, with longitudinal stripes of a deeper red : near the gill covers each side 2 black spots.

Red Gilthead. *Br. Zool. n.* 113. *Bloch t.* 267.

Body about the size of the last, covered with large ſcales ; *eyes* large, silvery : *skin* at the end of the dorſal and anal fins gathered up and hiding the last rays : *mouth* and *tongue* fine red : *belly* silvery, slightly marked with longitudinal yellowish streaks ; *tail* forked.

60. Sp. *Dentex.* Body reddish varied with brown: in each jaw 4 teeth larger than the rest.

Four-toothed Gilthead. *Donovan's Fishes t.* 73.

Body growing to a large size, varying much in colour, ſometimes ſpotted and streaked with black : *back* reddish : *tail* ſcaly at the baſe : *dorſal-fin* 20-rayed ; *pectoral* 12 ; *ventral* 5 ; *anal* 10 ; *caudal* 19-rayed.

61. Sp. *niger.* Above black, beneath silvery : back with a silvery stripe along the base of the dorsal-fin : dorsal and anal-fins clothed with silvery scales.

Toothed Gilthead. *Br. Zool t.* 43. *Linn. Trans.* 7. *p.* 292.

Taken in Swanſea Bay Nov. 12, 1806.

Body 2 feet long, 9 inches deep, very much compressed, rounded on the forepart of the back, covered with large firm angular ſcales placed in an hexagonal manner : *head* much rounded and sloping in front : *mouth* oblique downwards : *jaws* nearly equal : *teeth* a single row of incurved larger-ones and a row or two of ſmaller-ones in each jaw, besides a short longitudinal maſs of obtuſe ones on each side in the palate of the upper-jaw : *eyes* very large, distant ; *iris* white : *gill-covers* of 2 pieces ; the apertures very large, membrane 7-rayed : *lateral-line* obſolete : *vent* in the middle, between the ventral and anal-fins : *fins* all covered with silvery ſcales at the baſe : *dorsal* falcate, the first 7 rays very high, 34-rayed, and like the anal clothed with silvery imbricate ſcales placed longitudinally; the rays ending in short faſcicular processes : *pectoral* pointed, 20-rayed : *ventral* pointed, 6-rayed, with a ſmaller ſupplemental one at the sides covered with silvery ſcales : *anal* ſomewhat falcate, 28-rayed : the rays ending in short faſcicular processes : *tail* black, forked, with pointed lobes, 24-rayed.

19. LABRUS. *Wrasse.*

62. L. *gibbus*: Variegated blue and orange : dorsal and anal-fins green spotted with black.

Gibbous Wrasse. *Penn. Brit. Zool.* iii. *t.* 46.

Body about 8 inches long, size of a perch, but more gibbous on the back, covered with large ſcales : *head* sloping ; above each *eye* a dusky ſemilunar ſpot : first *gill-cover* finely ſerrate : *pectoral-fins* yellow, tranſverſely striped with red at the baſe : *ventral* and *caudal* ſea-green : *dorſal-fin* 25-rayed ; *pectoral* 13 ; *ventral* 6 ; *anal* 13 ; *tail* large, 15-rayed.

63. L. *Tinca.* Yellowish, variegated with blue, and spotted with red : fins red, spotted with white : lips reflected : dorsal-fin ramentaceous.

Ancient Wrasse, Old Wife. *Br. Zool. t.* 44. *Donov. t.* 83.

Body 15-18 inches long, of a rather bulky form, with a dusky hue on the back, and variegated with blue red and yellow : *fins* edged with brown : *lips* large, reflected, retractile : *teeth* in 2 rows, the first row conic : *gill-covers* with radiate depressions under the ſcales : above the *noſe* a deep furrow : *throat* with two tubercled bones above, and one below : *dorſal-fin* 36-rayed ; *pectoral* 14 ; *ventral* 6 ; *anal* 12 ; *tail* 14-rayed.

64. L. *Julis.* **Back green, sides blackish with a longitudinal indented fulvous stripe : 2 front-teeth longer.**
Indented striped Wrasse. *Donovan's Fishes, t.* 96.
Body 7 or 8 inches long, elongated, changeable blue-green with the indented stripe fulvous and silvery, belly silvery : *jaws* equal : *dorſal-fin* with a black spot at the top, 22-rayed ; *pectoral* 12 ; *ventral* 6 ; *anal* 15 ; *tail* 13-rayed.

65. L. *variegatus.* **Red with 4 longitudinal greenish-olive stripes each side, and as many blue-ones.**
Striped Wrasse. *Br. Zool.* iii. *t.* 45. *Donovan t.* 21.
Body oblong, about 10 inches long, covered with large ſcales : *lips* large, doubled : *gill-membrane* 5-rayed, the covers grey striped with yellow : *throat* almost yellow : at the baſe of the *pectoral-fins* a dark olive ſpot : *dorſal-fin* marked at the beginning with a broad band of rich blue, the middle part white, the rest red : *anal* and *ventral-fins* edged with blue : *dorſal-fin* 31-rayed ; *pectoral* 15 ; *ventral* 6 ; *anal* 15 ; *tail* blue on the upper half, yellow on the lower.

66. L. *bimaculatus.* **Grey, with a brown rounded spot each side on the middle of the body, and another near the tail.**
Bimaculated Wrasse. *Penn. Brit. Zool.* iii. *p.* 247. *n.* 117.
Body rather deep, of a light colour : *gill-membrane* 6-rayed : *lateral-line* curved : *dorsal-fin* 26-rayed ; *pectoral* 15 ; *ventral* 6 ; *anal* 12.

67. L. *trimacalatus.* **Red, with large scales, and 3 black spots towards the end of the back.**
Trimaculated Wrasse. *Br. Zool. t.* 46. *Donovan's Fishes t.* 49.
Body oblong, about 12 inches in length, above orange-red, paler beneath, with 4 rose-coloured ſpots alternating with the black ones : *gill-membrane* 5-rayed : *fins* ſome of them edged with blue : *lateral-line* nearly straight : *dorſal-fin* 30-rayed ; *pectoral* 16 ; *ventral* 6 ; *anal* 14 : *tail* 14-rayed.

68. L. *Comber.* **Slender, red, beneath yellow : beneath the lateral-line a longitudinal silvery stripe.**
Comber Wrasse. *Br. Zool.* iii. *p.* 252. t. 47.
Back, fins, and *tail* red : *belly* yellow : *silvery-stripe* parallel, ſmooth, even : *dorſal-fin* 31-rayed ; *pectoral* 14 ; *ventral* 5 ; *anal* 10.

69. L. *Coquus.* **Slender, purple and dark blue, beneath yellow.**
Cook Wrasse. *Br. Zool.* iii. *n.* 123. *Ray. Piſc.* 163. *f.* 4.
Body reſembling the last : *back* purple and dark blue : *belly* yellow.

70. L. *cornubicus.* **Variegated green brown and yellow: near the tail a round brown spot : anal-fin yellow, obliquely barred with brown.**
Coldfinny. *Donovan's Fishes tab.* 72. *Br. Zool.* iii. *t.* 47.
Body about a palm long, shaped like L. Tinca : *lips* doubled ; *jaws* and *gill-covers* rich yellow : *belly* yellowish-white : *dorsal-fin* greenish, with dusky clouds : *pectoral* and *ventral-fins* yellowish-white : *dorsal-fin* 25-rayed ; *pectoral* 12 : *vetral* 7 ; *anal* 13 ; *tail* green, 14-rayed.

71. L. *lineatus.* **Greenish beneath yellowish, with numerous parallel longitudinal yellowish lines.**
Streaked Wrasse. *Donovan's Brit. Fishes, tab.* 74.
Body 7 inches long, with green head back and fins, the sides pale : *iris* yellow, pupil black : *lateral-line* curved : *dorsal-fin* 30-rayed : *pectoral* 14 ; *ventral* 8 ; *anal* 11 ; *tail* 15-rayed.

20. PERCA. *Perch.*

A. *With 2 distinct dorsal-fins.*

72. P. *fluviatilis*. Brownish-olive, with short dusky transverse bands on the sides: dorsal-fins pale violet-brown, the rest red.

2. Back much raiſed, curved and distorted near the tail.

Common Perch. *Br. Zool.* iii *t.* 48. *Donovan t.* 52.

Body ſometimes growing to a large size, with a gilded tinge on the sides, whitish towards the belly; *nostrils* near the eyes, double, with 4 pores before them: *mouth* large: *jaws* nearly equal: *teeth* ſmall, in the jaws and on the roof; *tongue* short, ſmooth: first *dorſal-fin* with 15 ſpinous rays, marked with a roundish black ſpot accompanied with a ſmaller-one; ſecond with 15 ſoft rays: *pectoral* 14; *ventral* 8; *anal* 12; *tail* a little forked, 21 rayed.

73. P. *Labrax*. Back dusky with a blue tinge, belly silvery: second dorsal-fin with 14 rays.

Basse. *Br. Zool.* iii. *t.* 49. *Donovan's Fishes t.* 43.

Body shaped like a ſalmon, and growing to the weight of 15 pounds; *mouth* large, filled with ſmall teeth, with a triangular rough ſpace in the roof: *eyes* large, reddish, iris silvery; when young the ſpace above it is marked with ſmall black ſpots; *gill-covers* ending in a sharp point: *dorsal-fins* brown, the first 9-rayed, ſecond 14; *pectoral* brownish, 18-rayed; *ventral* reddish-white, 6-rayed; *tail* slightly forked, brown, 21-rayed.

B. *With a single dorsal-fin.*

74. P. *cernua*. Olive-brown with blackish dots: dorsal-fin 27-rayed, the first 15 of which are spinous.

Ruffe. *Donovan's Fishes t.* 39. *Shaw zool.* iv. *t.* 79.

Body about 6 inches long, slender, mucous, yellowish-olive on the sides, blackish on the nape and back, whitish on the breast and belly, covered with numerous dusky ſpots on the body pectoral dorſal and anal fins: *lateral-line* a little curved: *head* thick, flattish: *eyes* large, pupil blue, iris brown with a yellow mark: *jaws* equal: *fins* yellowish; *dorsal* 27-rayed; *pectoral* 13; *ventral* 6; *anal* 7; *tail* sharply-forked, 19-rayed.

21. SCOMBER. *Mackrel.*

75. Sc. *Scomber*. Blue green, with numerous transverse black lines: belly silvery: 5 spurious fins above and below.

Common Mackrel. *Br zool. iii. t.* 51. *Shaw zool.* iv. *t.* 34.

Body 1-2 feet long, dark-green varied with blue and crossed with black bands above the lateral-line: *head* long: *eyes* large, covered at first with a white film; *mouth* large; the lower-jaw longer: *tongue* looſe, pointed, ſmooth: *teeth* in both jaws and round the edge of the palate: *gill-covers* of 3 pieces, silvery: *ſcales* ſmall, oval, tranſparent: *lateral-line* nearer to and parallel with the back, with generally ſome dusky ſpots along it: *ſpurious-fins* ſmall, grey: *dorsal-fins* 12, 12-rayed; *pectoral* 20; *ventral* 6; *anal* 13; *tail* forked, 20-rayed.

76. Sc. *Colias*. Varied with rich green and blue: spurious fins 5 both above and below.

Coly Mackrel. *Will. ichth. p.* 182. *Syst. Nat. p.* 824.

Found frequently in the Weirs about Swanſea, and very much reſembles the last, except in size which ſeldom exceeds 6 or 7 inches in length. Its colours are much richer, and it does not appear to come in shoals.

77. Sc. *Thynnus.* Above brownish-blue, beneath silvery: spurious fins about 10, both above and below.

Tunny. *Br. Zool.* iii. *t.* 52. *Donovan t.* 5.

Body 3-10 feet long, a little convex above, becoming ſuddenly slender towards the tail where it becomes angular: *head* ſmall; *iris* pale green: *tongue* short, ſmooth: *lower-jaw* longer: *gill-cover* of 2 pieces: *ſcales* ſmall, thin, deciduous: first *dorſal-fin*, concealed in a cavity on the back when cloſed, 14-rayed; ſecond falcate, 12-rayed: *pectoral* long, yellowish, 32-rayed: *ventral* short, grey, 6-rayed: *anal* yellowish, 13-rayed: *tail* grey, lunate, 30-rayed; *ſpurious-fins* yellow.

78. Sc. *Trachurus.* Above blue-green, beneath silvery: upper gill-covers with a black spot: spurious fins united: lateral-line covered with wide imbricate prickly plates.

Scad. *Donovan's Brit. Fishes* i. *tab.* 3.

Body 12-18 inches long, covered with thin broad ſcales, a little prominent and carinate on the back: *head* large: *jaws* obtuſe, the lower-one longer: *tongue* broad, thin, ſmooth: *iris* reddish-silvery: *gill-cover* of 2 pieces: *fins* whitish, the first rays of the first dorſal black: *dorsal* 8, 34-rayed; *pectoral* 20; *ventral* 6; *anal* 30, with 2 ſpines before it; *tail* lunate, 20-rayed.

22. GASTEROSTEUS. *Stickleback.*

79. G. *aculeatus.* Above olive, beneath silvery-red: back with 3 spines.

Three-ſpined Stickleback, Banistikle. *Br. Zool. t.* 50. *Don. t.* 11.

Body barely 2 inches long: *head* compressed, sloping: *eyes* large, prominent; iris silvery: *sides* silvery, ſquare near the tail: *chin* and *breast* ſometimes fine red: *belly* prominent: *lateral-line* rough, near the back: *fins* yellowish; *dorsal* near the tail, 12-rayed; *pectoral* 10; *ventral* a plate with 2 unequal ſpines; *anal* 9, one of them ſpinous; *tail* even 12-rayed.

80. G. *Pungitius.* Olive, beneath silvery: back with about 10 spines.

Ten-ſpined Stickleback. *Br. Zool. t.* 50. *Donov. t.* 32.

Body about an inch and a half long, with the dorſal ſpines crossing each other, and amounting ſometimes to 11, ſometimes only 9: *sides* not ſpeckled, yellowish; *dorſal-fin* 10-rayed; *pectoral* 10; *ventral* of one ſpine; *anal* 10; *tail* a little rounded, 12-rayed,

81. G. *Spinachia.* Olive spotted with black: along the sides of the jaws a silvery stripe: lateral-line prominent, shielded: back with 15 spines.

Fifteen-ſpined Stickleback. *Brit. Zool. t.* 50. *Donovan t.* 45.

Body 6 or 7 inches long, very slender and lanceolate towards the tail: *head* lengthened, cylindrical; lower-jaw longer: *iris* silvery: *trunk* ſomewhat 5-sided: *lateral-line* compoſed of a row of plates; *dorsal-spines* placed in a cavity and bent back: *dorsal-fin* 7-rayed; *pectoral* oblong, 10; *ventral* of 2 ſpinous rays: *anal* with a ſpine before it; *tail* rounded, with an elevated line above and beneath, 12-rayed.

23. MULLUS. *Surmullet.*

82. M. *barbatus.* Red, with an olive tinge above and a silvery one beneath.

Red Surmullet. *Pennant Br. Zool.* iii. *p.* 271. *n.* 135.

Body 12-15 inches long, covered with thin deciduous ſcales, under which it is of a bright red: *lower-jaw* with 2 cirri: *dorsal-fins* 7, 9-rayed; *pectoral* 15; *ventral* 6; *anal* 7; *tail* 16-rayed.

83. M. *Surmulletus*. Red, with 2 or 3 longitudinal yellow stripes each side.

Striped Surmullet. *Br. Zool. t.* 53. *Donovan t,* 12.

Body about a foot long, a little silvery beneath : *ſcales* silvery with tawny lines: *eyes* round ; pupil blue, ſurrounded with a red ring ; iris silvery : upper *gill-cover* ending in a ſoft blunt elongation : *lateral-line* arched with the back ; *fins* yellowish, with the rays mostly red : *lower-jaw* with 2 beards : *dorsal-fins* 7, 9-rayed ; *pectoral* 16 ; *ventral* 7 ; *anal* 8 ; *tail* forked, 20-rayed.

24. TRIGLA. *Gurnard.*

84. T. *Gurnardus*. Throat with 3 appendages : above grey with whitish and dusky spots, beneath silvery : lateral-line clothed with rounded whitish scales.

Grey Gurnard. *Br. Zool. t.* 54. *Donovan t.* 30. *Shaw Zool. t.* 90.

Body 1-3 feet long, covered with ſmall white ſcales : above the *eyes* 2 short ſpines each side : *iris* silvery : *noſe* sloping, slightly forked, with 3 short ſpines each side : *gill-covers* radiate, ending in a point : *vent* nearer the head : *rays* of the fins longer than the membrane ; *dorsal-fins* 7, 19-rayed, the first grey ſpotted with white, the ſecond reddish-ash ; *pectoral* dark-grey, 10-rayed ; *ventral* whitish, 6 ; *anal* reddish-ash, 20 ; *tail* lunate, dark grey, 14-rayed.

85. T. *Lyra*. Throat with 3 appendages : red, beneath silvery : nose 2-lobed, with 3 spines each side.

Piper. *Br. Zool. t.* 55.

Body about 2-feet long : *upper-jaw* much longer than the lower : on the inner corner of each *eye* a strong ſpine, the plates of the head ending each side in another, and a large one over the pectoral-fins: *back* ſerrate with sharp ſpines : *dorſal-fins* yellowish with red rays, 10, 18-rayed ; *pectoral* slightly tinged with blue, 12-rayed ; *ventral* yellowish with red rays, 6-rayed with a ſpine ; *anal* 18, the first ſpinous ; *tail* lunate, tinged with blue.

86. T. *Cuculus*. Throat with 3 appendages : red, beneath silvery : first dorsal-fin with a black spot.

Red Gurnard. *Br. Zool. t.* 57. *Shaw Zool. t.* 90.

Body about a foot long, more or less marked with whitish tranſverſe bands, covered with minute ſcales : *noſe* with 3 ſpines each side : *lateral-line* with broad silvery ſcales edged with black, and another row each side the back : *dorſal-fins* 9, 16-rayed, the ſecond with a yellowish edge ; *pectoral* 10 ; *ventral* 6 ; *anal* 16 ; *tail* lunate, 13-rayed.

87. T. *Hirundo*. Throat with 3 appendages : grey-brown, beneath silvery : pectoral-fins very large, olive-green, spotted and edged with rich blue.

Sapphirine Gurnard. *Br. Zool. t,* 56. *Donovan t.* 1.

Body a foot or more long, tinged with red at the sides : *lateral-line* rough : *eyes* with 2 ſpines at the inner corner of each : *noſe* cloven, ſpinous : *vent* near the head : *dorsal-fins* with 9, 17 simple rays ; *pectoral* 9 branched rays ; *ventral* 6, branched ; *anal* 14, simple ; *tail* brownish, slightly lunate, 16-rayed.

88. T. *lineata*. Throat with 3 appendages : red, beneath white, with numerous ridges across the sides.

Streaked Gurnard. *Br. Zool. t.* 57. *Donovan t.* 4.

Body about a foot long : *head* large, ſuddenly sloping, radiate on the sides : *noſe* cloven, with short ſpines : *back* ſerrate : *lateral-line* plated : *fins* with dusky ſpots : *dorsal* 10, 17-rayed ; *pectoral* 10 ; *ventral* 6 ; *anal* 15 ; *tail* slightly lunate, 16-rayed.

ORDER IV. ABDOMINALES. *ABDOMINAL.*

25. COBITIS. *Loche.*

89. C. *Barbatula.* Yellowish-grey, with dusky variations: unarmed, compressed, with 6 beards.

Common Loche. *Br. Zool. t.* 58. *Donovan t.* 22.

Body 3 or 4 inches long: *head* sloping, obtuſe, with 4 beards on the upper-lip and one at each angle of the mouth: *upper-jaw* a little longer; *lateral-line* straight: *dorſal-fin* ſpotted, 9-rayed; *pectoral* ſpotted, 11-rayed; *ventral* white, 8; *anal* white, 7; *tail* broad, ſpotted, 19-rayed.

90. C. *Tænia.* Yellowish-grey, with dusky spots: head compressed, with a forked spine beneath each eye, and 6 beards.

Groundling. *Bloch* i. *p.* 216. *tab.* 31. *f.* 1.

Found in the clear streams of Wiltshire with the last, from which it principally differs, in being ſomething larger, and in having a double ſpine each side the head a little before the eyes.

26. SALMO. *Salmon.*

91. S. *Salar.* Silvery-grey, with blackish or grey spots: lower-jaw of the male ending in an incurved elongation: tail forked.

Salmon. *Br. Zool. t.* 58. *Shaw Zool. t.* 102.

Body 2-4 feet long, blackish in front and on the cheeks: *eyes* ſmall, iris silvery: *jaws* of the male more or leſs incurved: *tongue* with 6 or 8 recurved teeth: *fleshy-fin* and lateral-line black: *ventral-fins* with an appendage at the baſe: *dorſal-fin* 14-rayed; *pectoral* 14; *ventral* 10; *anal* 13; *caudal* 21-rayed.

92. S. *Eriox.* Deep silvery-grey, with purplish-grey spots: lower-jaw a little longer: tail nearly even.

Shewen. *Br. Zool.* iii. *p.* 225. *n.* 144. *Donovan t.* 91.

Reſembles the laſt but is ſmaller and the flesh is paler: *jaws* of the male very slightly incurved; *belly* silvery; *dorſal-fin* ſpotted, the rays above the membrane, 12-rayed; *pectoral* 14; *ventral* 10; *anal* 12; *tail* 24-rayed.

93. S. *Trutta.* Purplish-grey, with black drop-like spots on the head body and dorsal-fin.

Salmon Trout. *Bloch* 1. *p.* 143. *tab.* 21.

Body ſmaller than the Salmon, covered with ſmall round dusky ſpots ſurrounded by a paler circle: *jaws* equal: *tail* slightly cloven: *dorſal-fin* 14-rayed; *pectoral* 14; *ventral* 9; *anal* 10; *tail* 20-rayed.

94. S. *Fario.* Yellowish-grey, with purple or red spots: lower-jaw a little longer than the upper.

2. Stomach very large. *Gillaroo Trout. Sow. Miſc. t.* 61.

Body about a foot long, narrow, olive above the lateral line, yellow beneath it, belly white: *cheeks* yellow and green: *iris* white, with a ſemilunar blackish edge: *fins* purplish-yellow, the dorſal ſpotted, the fleshy-one brown tipt with red, the ventral with a pointed appendage: *dorſal-fin* 13-rayed; *pectoral* 13; *ventral* 9; *anal* 9, edged with white: *tail* slightly forked, 25-rayed.

95. S. *Phinoc.* Silvery-grey, with very splendid belly: dorsal-fin spotted with black: tail black, forked.

White Salmon. *Penn. Brit. Zool.* iii. *p.* 302. *n.* 147.

Body about a foot long, of an elegant form, with the back straight, above dusky and silvery intermixed, beneath of an exquiſite silvery whiteneſs : *upper-jaw* a little longer, with two rows of teeth, one in the lower, and 6 on the tongue : *dorſal-fin* 11-rayed ; *pectoral* 13 ; *ventral* 9 ; *anal* 9 ; *tail* much forked.

96. S. *Salmulus.* Blueish-grey, with distant reddish spots : tail forked. Parr.

Samlet. *Brit. Zool. n.* 148. *Shaw Zool.* v. *p.* 55.

Body 6 or 7 inches long, deeper than the Trout with a narrower head and leſs mouth, marked with ſeveral dusky ſpots or tranſverſe bars, with fewer ſpots and not ſo light : *pectoral-fins* with generally one large black ſpot : *fleshy-fin* not tipt with red, nor the anal edged with white : *tail* much more forked than in the trout.

97. S. *Salvelinus.* Purplish-grey, spotted with red : lower-fins and belly scarlet.

Red Charr. *Br. Zool. n.* 149. *Shaw Zool.* v. *t.* 105.

Body about a foot long, slender, brownish-blue on the back, silvery on the sides : *jaws* nearly of equal length ; *tongue* looſe, and like the *palate* with two rows of teeth : *ſpots* on the sides with ſometimes a pale margin : first ray of the *ventral* and *anal-fins* white : *fleshy-fin* tipt with brown : *dorsal-fin* 13-rayed ; *pectoral* 14 ; *ventral* 9 ; *anal* 12 ; *tail* forked, 24-rayed.

98. S. *alpinus.* With red and dusky specks : back dark-olive, sides blueish, belly fulvous : gill-covers a little gilt : dorsal-fin spotted.

Alpine Salmon. Charr. *Br. Zool. t.* 60. *Donovan t.* 61.

Body about a foot long, ſpeckled with black and red on the back and sides : *jaws* equal : *fins* reddish, except the dorſal, which is pale brown ſpotted with black ; the fleshy-one edged with red : *dorsal-fin* 11-rayed ; *pectoral* 16 ; *ventral* 11 ; *anal* 10 ; *tail* slightly forked, 24-rayed.

99. S. *Eperlanus.* Back greenish-white, sides varied with blue, belly silvery : head transparent : anal-fin with 17 rays.

Smelt. *Br. Zool. t.* 61. *Donovan t.* 48.

Body 6 or 7 inches long, slender, ſemitranſparent : *head* ſmall, obtuſe ; the under-jaw longer and a little curved, with 4 large teeth in the upper : *palate* and *tongue* with 2 rows of teeth each : *eyes* silvery : *dorsal-fin* 11 rayed ; *pectoral* 12 ; *ventral* 8 ; *anal* opposite the dorſal, 14 ; *tail* forked, 21-rayed.

100. S. *Thymallus.* Grey, with longitudinal dusky-blue lines : dorsal-fin violet with brown bars.

Grayling. *Br. Zool. t.* 61. *Donovan t,* 88.

Body about 18 inches long, rather slender, silvery-grey with numerous dark lines : *head* obtuſe, dusky above, greenish at the sides : the upper-jaw longer : *gill-covers* glossy-green : *eyes* prominent ; iris silvery dotted with yellow : *teeth* very minute : *tongue* ſmooth : *back* arched ; *lateral-line* with dusky dots : *lower-fins* and *tail* rufous-brown : *dorsal-fin* 23-rayed ; *pectoral* grey, 12 ; *ventral* 7 ; *anal* 11 ; *tail* forked, 19-rayed.

101. S. *Lavaretus.* Above purplish-blue, beneath silvery with a gold tinge : scales broad : upper-lip projecting in a nose-like form.

Gwiniad. *Br. Zool. t.* 62. *Shaw Zool.* v. *t.* 105.

Body hardly a foot long, thicker than the trout : *head* ſmall, taper, ending in a blackish kind of proboſcis : *mouth* ſmall, without visible teeth : *eyes* moderate, pupil deep blue, iris silvery ; *cheeks* and *gill-covers* varied blue and yellow : *lateral-line* compoſed of 45 distinct dusky ſpots : *scales* large, notched in the middle : *dorsal-fin* 14-rayed ; *pectoral* yellowish, 18 ; *ventral* 12 ; *anal* 15 ; *tail* much forked, 20-rayed.

27. ESOX. *Pike.*

102. E. *Lucius.* Olive-grey with yellowish spots, belly white spotted with black: jaws depressed, nearly equal.

Pike. *Brit. Zool. t.* 63. *Shaw Zool.* v. *t.* 108.

Body lengthened, ſometimes growing to a vast size, blackish on the back; *head* flattened; upper-jaw broad, a little shorter; lower slightly turned up at the end and covered with ſmall punctures: *iris* golden, pupil bluish: *teeth* in the jaws alternately fixed and moveable, wih 3 longitudinal rows on the palate; *dorsal anal* and *caudal-fins* ſpotted with black: *dorsal-fin* 21-rayed; *pectoral* 15: *ventral* 11; *anal* 18; *tail* forked, 19-rayed.

103. E. *Saurus.* Blueish-green, beneath silvery: jaws subulate, gaping in the middle, of equal length: above and beneath 6 spurious-fins near the tail.

Saury Pike. *Br. Zool. t.* 64. *Linn. Trans.* 7. *p.* 60. *t.* 5.

Body about 11 inches long, tapering like an eel; *jaws* very slender, about an inch long, of equal length, the upper-one a little incurved: *pectoral* and *ventral-fins* ſmall: *dorsal* and *anal* opposite, shallow, continued down to the tail into 6 other ſmaller fins: *tail* much forked.

104. E. *Osseus.* Greenish, with pale red belly and fins, covered with square long scales: jaws very long, the upper longest.

Great Gar-fish. *Bloch t.* 390.

Taken on the Sussex Coast. *Berkenhout p.* 81.

Body 2 feet long, nearly cylindrical, covered with bony ſcales diſpoſed in oblique rows, except on the head and gill-covers; each ſcale marked into 4 triangular spaces: *gill-covers* pale red, radiate: *jaws* with sharp unequal teeth along the edges, 3 ſmaller-ones ſucceeding every larger-one: *eyes* large; iris yellow: *fins* all with the first ray doubly ſerrate: *back* with a row of sharp ſcales: *dorſal-fin* opposite the anal and near the tail, ſpotted with black, 6-rayed: *pectoral* 11; *ventral* 6; *anal* ſpotted, 5; *tail* rounded, ſpotted, 12-rayed.

105. E. *Belone.* Blue-green, beneath, silvery: jaws very long and taper, the lower one longest.

Gar Pike, Sea Needle. *Br. Zool. t.* 63. *Donovan t.* 64.

Body 2 or 3 feet long, nearly cylindrical, taper: *jaws* sharp-pointed, with numerous nearly equal teeth along the edges: *mouth* purple on the inside: *eyes* large; iris silvery: *belly* flat, bounded each side by a rough line: *dorsal-fin* 14-rayed, near the tail and opposite the anal; *pectoral* 13; *ventral* 7, the first ray ſpinous; *anal* 19; *tail* much forked, 23-rayed. The bones are green when the fish is boiled.

28. ARGENTINA. *Argentine.*

106 A. *Sphyræna.* Bright-silvery, greenish on the back: anal-fin with 9 rays.

Pearl Argentine. *Br. Zool.* iii. *p.* 327. *tab.* 65.

Body 2 or 3 inches long, compressed, nearly of equal depth: *head* purplish: *mouth* ſmall, with minute teeth: *eyes* large, iris silvery: *lateral-line* in the middle, nearly straight: *air-bladder* shining like polished silver: *dorsal-fin* placed near the equilibrium of the body, 10-rayed; *pectoral* 14; *ventral* 11; *anal* 9; *tail* forked.

29. ATHERINA. *Atherine.*

107. A. *Hespetus.* Yellowish, pale-olive on the back, semitransparent, reticulate with lines of blackish dots.

European Atherine. *Br. Zool. t.* 65. *Donovan. t.* 87.

Body 5 or 6 inches long, elegantly reticulate with brown ſpecks, a little prominent on the belly, covered with large ſcales: *crown* broad, sloping: *iris* with a brown ſpot above: *jaws* with numerous ſmall teeth: *gill-covers* silvery: *sides* with a broad polished silvery stripe from the gills to the tail, through the middle of which is the *lateral-line* which is straight, impressed, and has a row of black dots beneath it: *dorſal-fins* 8, 11-rayed; *pectoral* 13; *ventral* 6; *anal* 10-14; *tail* forked, 15-rayed.

30. MUGIL. *Mullet.*

108. M, *Cephalus.* Silvery-grey, dusky on the back: sides with numerous longitudinal blackish lines: first dorsal-fin 4-rayed.

Common Mullet. *Br. Zool. t.* 66. *Donovan t.* 15.

Body 14 or 15 inches long, a little convex on the back and protuberant on the belly: *head* flattened, taper: *mouth* ſmall: *tongue* rough: *pupil* black, encircled with a ſmall silvery line; iris hazel above, silvery below: *belly* silvery: *fins* bluish: *dorſal-fins* 4, 8-rayed; *pectoral* 17; *ventral* 7; *anal* 9; *tail* forked, 14-rayed, and 2 very short ones each side.

31. EXOCŒTUS. *Flying-fish,*

109. E. *volitans.* Silvery, brownish on the back: ventral-fins placed before the middle of the belly.

Oceanic Flying-fish. *Br. Zool. t.* 67. *Donovan. t* 31.

Body 12 or 14 inches long, flat on the back, and carinate each side on the belly, rounded and taper: *head* large, obtuſe: *ſcales* large: *dorſal-ſin* near the tail, 14-rayed; *pectoral* pointed, nearly as long as the body, 15-rayed; *ventral* slightly lunate, 6; *anal* opposite the dorſal, 13; *tail* forked, with unequal lobes, 15-rayed.

32. CLUPEA. *Herring.*

110. Cl. *Harengus.* Silvery, dusky-green on the back: lower-jaw longer: anal-fin 17-rayed: scales easily deciduous.

Common Herring. *Br. Zool. t.* 68. *Shaw Zoo.* v. *t.* 119.

Body 10 or 12 inches long, a little convex on the back, with a reddish or violet ſpot on the gill-covers when alive: *head* ſmall, taper: *iris* silvery: *ſcales* rather large and easily falling off: *fins* cinereous, the dorſal placed behind the centre of gravity, causing the head to fall down when held by it: *lateral-line* hardly visible: *belly* sharply carinate, but hardly ſerrate: *dorſal-fin* 18-rayed; *pectoral* 18; *ventral* 9; *anal* 17; *tail* 18-rayed.

111. Cl. *Pilcardus.* Silvery, dusky-green on the back: lower-jaw rather shorter, the upper ascending: dorsal-fin placed in the centre of gravity: scales very large, adhering firmly.

Pilchard. *Br. Zool. t.* 68. *Donovan t.* 69. *Shaw* v. *t.* 119.

Body rather less than the Herring, thicker and more rounded, the *back* more elevated, and the *belly* not ſo sharp: *head* more obtuſe: *dorsal-fin* 18-rayed; *pectoral* 16; *ventral* 8; *anal* 17; *tail* 32-rayed.

112. Cl. *Alosa.* Silvery, dusky on the back: along the sides a row of rounded black spots: belly serrate.

Shad. *Br. Zool. t.* 69. *Donov. t.* 57. *Shaw* v. *t.* 120.

Body 2 or 3 feet long, dusky-green or bluish on the back, convex above and below: *ſnout* bifid; upper-jaw a little longer, toothed at the edge: *gill-covers* striate, silvery at the edge: *ſcales* large, deciduous : *fins* cinereous, the ventral with pointed appendages : *dorſal-fin* 20-rayed ; *pectoral* 19 ; *ventral* 12 ; *anal* 21 ; *tail* with 2 dusky ſpots, 26-rayed.

113. Cl. *Sprattus*. Silvery, dusky-blue on the back : lower-jaw longer than the upper : belly strongly serrate.

Sprat. *Br. Zool.* iii. *p.* 346. *Bloch t.* 30. *f.* 2.

Body 4 or 5 inches long, much reſembling the herring, but the body is deeper, the back-fin placed more behind, with only 16 or 17 rays, and the ventral with only 6 or 7, the belly strongly ſerrate, and with only 48 bones in the back : *head* pointed, blackish in front, lower-jaw a little longer and curved : *eyes* large, iris yellowish white : *gill-covers* silvery, radiate : *keel* of the belly curved : *dorſal-fin* 17-rayed ; *pectoral* 16 ; *ventral* 7 ; *anal* 19 ; *tail* 18-rayed.

114. Cl. *Encrasicolus*. Silvery, greenish and semitransparent on the back : upper-jaw longer : belly not serrate.

Anchovy. *Donovans Fishes t.* 50. *Shaw Zool* v. *t.* 120.

Body about 3 or 4 inches long, slender, covered with thin deciduous ſcales : *head* long, the upper-jaw considerably longer : *mouth* very large, ſmooth within : *tongue* doubly ciliate each side : *eyes* large, iris silvery : *fins* tranſparent : *belly* ſmooth : *dorſal-fin* 15-rayed ; *pectoral* 15 ; *ventral* 7 ; *anal* 14 ; *tail* 24-rayed.

33. CYPRINUS. *Carp.*

A. *Mouth bearded.*

115. C. *Barbus*. Bluisih-white, olive on the back : mouth with 4 beards : second ray of the dorsal-fin serrate both sides : anal-fin 7-rayed.

Barbel. *Br. Zool. t.* 71. *Donov. t.* 29. *Shaw* v. *t.* 132.

Body growing to a large size, slender and taper : *head* taper, the upper-lip reddish and longer : *iris* pale brown : *nostrils* nearer the eyes : *beards* placed one on each side the upper-lip, and one at the corners of the mouth : *lateral-line* straight, dotted with black : *fins* reddish with a purple-brown cast ; the ventral with an appendage : *dorſal-fin* 12-rayed ; *pectoral* 13 ; *ventral* 11 ; *anal* 7 ; *tail* forked, 22-rayed.

116. C. *Carpio*. Yellowish-olive, whitish beneath : mouth with 4 beards : third ray of the dorsal-fin serrate behind : anal-fin 9-rayed.

Common carp. *Br. Zool. t.* 70. *Shaw. Zool.* v. *t.* 131.

Body 12-16 inches long, deep, with a wide dorſal-fin, blue-green on the back, covered with large ſcales which are longitudinally striate : *head* large, sloping, bearded like the Barbel : *jaws* nearly equal, with thick yellow lips : *lateral-line* slightly bent, dotted with black : *fins* violet-brown, the anal with a reddish tinge : *dorſal-fin* 25-rayed ; *pectoral* 16 ; *ventral* 5 ; *anal* 9 : *tail* slightly forked, 25-rayed.

117. C. *Gobio*. Pale olive-brown, silvery below : mouth with 2 beards : anal-fin 11-rayed : dorsal-fin and tail spotted with black.

Gudgeon. *Donovan t.* 71. *Bloch t.* 8. *f.* 2.

Body 5 or 6 inches long, thick, taper, ſometimes ſpotted with black, livid on the back, blue above the lateral line : *head* obtuſe, iris golden : *mouth* with a beard at each corner ; the upper-jaw a little longer : *lateral-line* nearly straight : *dorſal-fin* opposite the ventral, 8-rayed ; *pectoral* 15 ; *ventral* 8 ; *anal* 11 ; *tail* forked, 21-rayed.

118. C. *Tinca*. Blackish-olive with a gilded tinge, mucous : mouth with 2 beards : anal-fin 11-rayed : tail nearly even.

Tench. *Brit. Zool.* iii. *p.* 359. *Bloch t.* 14.

Body 12 or 14 inches long, covered with a thick slime, and very ſmall cloſely fixed ſcales, deep, with thick opake violet fins : *head* large, broad, deep green, iris golden : *chin* white : *jaws* equal : *lateral-line* a little curved : *belly* whitish : *dorſal-fin* 10-rayed ; *pectoral* 16 ; *ventral* 9 ; *anal* 11 ; *tail* truncate at the baſe and straight in the middle, 19-rayed.

B. *Mouth beardless.*

119. C. *Carassius*. Yellow-olive, with dusky-olive fins : 2 first rays of the dorsal-fin serrate : lateral-line straight : tail nearly entire.

Crusian. *Br. Zool. n.* 72. *Bloch. t.* 11.

Body 8 or 10 inches long, very deep and thick, with a wide dorſal-fin : *head* ſmall, obtuſe, varied on the sides with yellow and green : *iris* silvery, ſurrounded with a golden ring : *jaws* with 5 broad teeth in each : *back* carinate before the fin : *dorſal-fin* 20-rayed : *pectoral* 12 ; *ventral* 9 ; *anal* 10 ; *tail* slightly lunate, 22-rayed.

120. C. *Brama*. Broad, arched, olive, beneath flesh-colour : fins brown, anal about 29-rayed.

Bream *Br. Zool. t.* 70. *Shaw.* v. *t.* 124. *Donovan. t.* 93.

Body 2 feet or more long, covered with large ſcales, very deep, with a ſmall dorſal-fin : *head* truncate, reddish on the chin : *mouth* ſmall, the upper-jaw a little protruded : *iris* pale yellow ſpotted with black : *lateral-line* bent down, dotted with black : *ventral-fins* with a conic proceſs : *dorſal-fin* 12-rayed ; *pectoral* 17 ; *ventral* 9 ; *anal* 29 ; *tail* forked, 19-rayed.

121. C. *Erythrophthalmus*. Olive with a gilded tinge, paler below : iris orange : lower-fins red.

Rud. *Br. Zool. t.* 62. *Donov. t.* 40. *Bloch. t.* 1.

Body 8 or 10 inches long, broad, covered with large ſcales, greenish above the lateral-line : *head* ſmall ; jaws equal, the lower-one a little curved : *teeth* ſerrate, in 2 rows : *nostrils* large : *back* arched, carinate before the fin which is placed below the middle : *lateral-line* a little curved downwards, with about 30 raiſed dots : *dorſal-fin* greenish, edged with red, 11-rayed ; *pectoral* 19 ; *ventral* 10 ; *anal* 12-15 ; *tail* forked, 20-rayed.

122. C *Rutilus*. Yellowish-silvery, dusky-green on the back : fins red ; anal fin 12-rayed.

Roach. *Donovan's Fiſhes t.* 67. *Bloch t.* 2.

Body much reſembling the Rud, but is longer and slenderer, and the *jaws* have each a row of 5 compressed teeth : *lips* red : *back* a little arched : *lateral-line* bent down, with about 36 dots : *dorſal-fin* in the middle of the back 10-rayed ; *pectoral* 13 ; *ventral* 9 ; *anal* 12 : *tail* deeply forked, 22-rayed.

123. C. *auratus*. Splendid gold-red, with scarlet fins : anal-fin double, placed like the ventral : tail often 3 or 4-parted.

Golden Carp, Goldfiſh. *Shaw Zool.* v. *t.* 126. 127. *Edwards t.* 209.

Naturalized from *China*, and is found in great plenty in the ditches between Camberwell and London.

Body varying much in size, colour, and appearance of the fins, co-with large ſcales : *head* short, with equal jaws ; *nostrils* tubular : *iris* golden : *gill-covers* 2-leaved : *lateral-line* straight, nearer the back : *dorſal-fin* 20-rayed ; *pectoral* 16 ; *ventral* 11 ; *anal* 9 ; *tail* 27-rayed.

124. C. *Jeses*. Silvery-bluish, olive on the back : head thick : snout rounded : anal-fin 14-rayed.

Chub. *Br. Zool, t.* 73, *Shaw. Zool.* v. *p.* 226.

Body 14 or 16 inches long, thick, with ferruginous-brown fins : *head* truncate, dusky in front : *eyes* large, pupil glaucous, iris yellow : *gill-covers* blue-green : *lateral-line* straight, with about 58 dull yellow dots : *dorſal-fin* a little behind the ventral, 11-rayed : *pectoral* 16 ; *ventral* 9 ; *anal* 14 ; *tail* a little forked, 14-rayed.

125. C. *Leuciscus*. Silvery-yellow, olive on the back : dorsal-fin brown, 10-rayed, the rest reddish : anal-fin 11-rayed : tail much forked.

Dace. *Donovan t.* 77. *Shaw Zool.* v. *t.* 130.

Body from half a foot to a foot long, rather slender : *head* ſmall : *iris* yellowish : *jaws* equal : *back* a little convex : *ventral-fins* with pointed appendages : *lateral-line* a little curved downwards : *dorſal-fin* 10-rayed ; *pectoral* 18 ; *ventral* 9 ; *anal* 11 ; *tail* 22-rayed.

2. Body slenderer : back straight : eyes red.

Grayning. *Br. Zool.* iii. *p.* 367. *Shaw Zool.* v. *p.* 234.

Reſembles the Dace, and is about ſeven and a half inches long ; but the back is silvery with a bluish cast, and the ventral-fins redder ; *dorſal-fin* 8-rayed ; *pectoral* 15 : *tail* 32-rayed.

126. C. *alburnus*. Silvery, olive on the back : anal-fin 20-rayed : tail much forked : lower-jaw longer.

Bleak. *Br. Zool. n.* 73. *Donov. t.* 18. *Shaw Zool.* v. *t.* 132.

Body 5 or 6 inches long, slender, compressed, covered with thin shining ſcales : *head* ſmall : *eyes* large, pupil blue, iris silvery : *back* nearly straight, the fin placed farther back than the ventral : *lateral-line* a little curved downwards : *dorſal-fin* greenish, 10-rayed; *pectoral* whitish with red ſpecks, 14 ; *ventral* 9 ; *anal* grey, 20 ; *tail* greenish, 18-rayed.

Obs. The *White Bait*, which has hitherto been considered as a variety of this fish, appears by the judicious and accurate investigation of the Author of British Fishes, to be merely the young fry of the *Clupea Alosa*, or *Shad*. *Donovan's Brit. Fishes*, *t.* 98.

127. C. *Phoxinus*. Dusky green, varied on the sides with blue and yellow, belly reddish-silvery : tail with a dusky spot at the base : anal-fin 8-rayed.

Grayling. *Donovan t.* 60. *Shaw Zool.* v. *t.* 132.

Body 2 or 3 inches long, slender, varying in colours from blue, green, or red, to whitish : *head* short, jaws equal, red at the edges: *eyes* ſmall, iris golden : *lateral-line* straight, golden : *fins* pale, with a red ſpot at the baſe : *dorſal-fin* 8-rayed ; *pectoral* 10 ; *ventral* 7 ; *anal* 8 ; *tail* forked, 19-rayed.

ORDER V. CARTILAGINEI. *CARTILAGINOUS.*

34. PETROMYZON. *Lamprey.*

128. P. *marinus*. Olive, varied with brown and yellowish-white : fins dull orange : tail bluish, distinct from the second dorsal-fin.

Lamprey. *Brit. Zool. t.* 8. *Donov. t.* 81. *Shaw* v. *t.* 133.

Body about 3 feet long, with yellowish-white clouds : *mouth* large, oval, concave, with about 29 circular rows of triangular orange teeth : *tongue* short, lunate, edged with ſmall teeth : *eyes* round, ſmall, iris yellow, with 2 rows of ſmall punctures near them : *dorſal-fin* below the middle of the back, shallow and rather rounded;

the ſecond cloſe to it, and rather triangular: *tail* ſomewhat rounded.

129. P. *fluviatilis*. Dusky-blue, beneath silvery: fins violet; the second dorsal-fin angular and united to the tail.

Lampern. *Br. Zool.* iii. *t.* 8. *Donovan t.* 54.

Body 10 or 12 inches long, marked above with tranſverſe undulate lines: *mouth* with 3 rows of teeth, the outer of which consists of a larger forked tooth each side, the ſecond of 2 trifid ones, and the inner-row of 7 ſmall ones with a detached double-one each side, and ſeveral irregular ones forward: *iris* golden: first *dorſal-fin* angular, and remote from the ſecond; the ſecond angular and connected with the tail which is rather pointed.

130. P. *branchialis*. Pale, beneath white, annulate: mouth lobed each side beneath: second dorsal-fin even, and connected with the tail.

Pride. *Br. Zool.* iii. *t.* 8. *Plot Oxfordsh. p.* 182. *t.* 10.

Body 7 or 8 inches long, and about the thickneſs of a Swan's quill, pale olive-green above, yellowish at the sides, white beneath, marked with annular worm-like-lines: *mouth* without teeth: ſecond *dorsal-fin* not raiſed in the middle into an angular projection, and hardly a line broad: *tail* lanceolate, pointed.

35. GASTROBRANCHUS. *Hag-fish.*

131. G. *cæcus*. Livid, beneath paler: mouth with 8 beards.

Glutinous Hag. *Br. Zool.* iv. *t.* 20. *Shaw Zool.* v. *t.* 131.

Body 5 or 6 inches long, a little reddish towards the tail, carinate beneath, without eyes, nostrils, ſcales or lateral-line, very glutinous: *mouth* oblong, with 2 beards each side, and 4 at top, with a ſmall ſpiracle furnished with a valve in front: *teeth* orange, in a double row each side like a pectinate bone, the upper-rows of 9 and the lower of 8, with a single curved tooth in the middle of the roof: *belly* with a longitudinal row of pores each side: *tail* with a narrow fin beginning from the lower-part of the back and reaching round to the vent.

36. RAJA. *Ray.*

A. *Of a rounded shape.*

132. R. *Torpedo*. Brownish, quite smooth, with scattered pores each side on the back.

Electric Ray. *Br. Zool.* iii. *t.* 10. *Donov. t.* 53. *Shaw* v. *t.* 146.

Body 2 feet long or more, nearly circular, with ſometimes 5 round dusky ſpots each side, beneath whitish: *eyes* ſmall, near tog. with a radiate orifice behind each: *mouth* ſmall, with minute ſharp, teeth: *ventral-fins* below the body, rounded: *dorsal-fins* 2, near the tail, obtuſe: *tail* longish, even and oblique at the end.

B. *Of a rhombic form, with sharp teeth.*

133. R. *Batis*. Cinereous varied with black, beneath white dotted with black: back smooth: tail with a single row of spines.

Skate. *Brit. Zool.* iii. *t.* 9. *Shaw Zool.* v. *t.* 136.

Body growing to a large size, with numerous hooked ſpines round the eyes, and in the males the fins are full of ſpines: *head* pointed: *iris* ſemilunar, yellow edged with white: *jaws* covered with minute sharp teeth: *ventral-fins* lobed, 6-rayed; *anal* long, clavate, 6-rayed; *tail* pointed, with 2 fins near the end, and a sharp ſpine or two on the sides.

134. R. *Oxyrinchus.* Cinereous, with pale and dusky variations: snout elongated, pointed: back and tail with a single row of spinous tubercles.

Sharp-noſed Ray. *Shaw Zool.* v. *p.* 276. *tab.* 138.

Body 6 or 7 feet long, white beneath, with 3 ſpines round each eye, and many ſoft ones over the whole body: *back* with 10 ſpines, and often 2 larger-ones: *fins* and *tail* blackish red: *ventral* and *anal* short, ſomewhat falcate: *tail* clavate, fringed with 2 ſmall membranous fins, with 2 fins near the end, and in the male often armed with a row of ſmall ſpines each side.

135. R. *Fullonica.* Grey spotted with black: back covered with spines: eyes with a single row, and tail with a double row of spines.

Fuller's Ray. *Br. Zool.* iii. *p.* 86. *n.* 33. *Shaw* v. *p.* 275.

Body growing to a large size: *ſnout* pointed, the nictitant membrane fringed: *teeth* ſmall, sharp: *pectoral-fins* with 3 rows of crooked ſpines above: *tail* slender, longer than the body with a double (triple, *Penn.*) row of ſpines. Is probably a variety of the next.

136. R. *Rubus.* Yellowish, with dusky spots: snout short, pointed: back with a single row, and tail with a triple row of spines.

Rough Ray. *Donovan's Brit. Fishes, tab.* 20.

Body growing large, with ſeveral other ſpines about the eyes and on the back, besides the row of larger-ones: *eyes* placed far back, pupil bluish, iris black: *mouth* wide, with numerous wedge-shaped teeth: *ventral* and *anal-fins* short, the former 3-rayed, the latter 6, and near theſe in the male are 2 long fin-like appendages: *tail* slender, nearly as long as the body with 2 fins, the last terminal.

137. R. *chagrinea.* Above grey-brown and tubercled: snout and tail with a triple row of spines.

Shagreen Ray. *Br. Zool.* iii. *p.* 87. *Shaw Zool.* v. *p.* 281.

Body growing large, covered with minute shagreen-like tubercles: *snout* long, sharp: *pupil* ſaphyrine, with a ſemicircular row of ſpines at the corner: *tail* with 2 rows of slender ſmall ſpines reaching a little up the back.

138. R. *Miraletus.* Grey-brown, spotted, with a large ocellate spot each side: eyes with a single row, and tail with a triple row of spines.

Mirrour Ray. *Donov. Brit. Fishes t.* 103. *Shaw* v. *t.* 139.

Body about the size of the Thornback, grey-brown and rough above, with brown and blue ſpots: *snout* taper, pointed: *pectoral-fins* each marked with a large ocellate ſpot ſurrounded with a dark-brown ring, the iris of which is whitish or pale blue, the pupil dark-brown: *eyes* with a single row of ſpines on the inside: *tail* with two rounded-oblong fins at the end.

C. *Body rhombic, with blunt teeth.*

139. R. *clavata.* Yellowish-grey, spotted: snout rather pointed: body covered with clavate prickles, besides a single row of claw-like-ones down the back and tail.

Thornback. *Br. Zool. t.* 11. 12. *Donovan t.* 26. *Shaw* v. *t.* 139.

Body growing to 12 feet long, brownish with white ſpots, or whitish with dusky ſpots, tubercled, clothed with ſpines above and underneath, which when they fall off leave a white ſpot: *belly* crossed with a strong ſemilunar cartilage: *head* rather long, pointed: *teeth* ſmall, round: *iris* ſemilunar, brown: *tail* longer than the body, obtuſe, with 2 fins near the end, and ſeveral clavate ſpines besides the claw-like-ones: *ventral-fins* pointed, 3-rayed; *anal* rounded, 6-rayed.

140. R. *Pastinaca.* Yellowish-olive, smooth: tail slender, pointed, without fin, armed near the middle with a long spine serrate both sides.

Sting Ray, Fire-flaire. *Br. Zool.* iii. *p.* 95. *Donovan t.* 99.

Body about 3 feet long, a little gibbous on the back, mucous, paler near the sides: *head* short, pointed: *iris* white: *teeth* granulate: *back* ſometimes armed with a ſerrate ſpine: *ventral-fins* none; the pectoral-ones rather rounded: *spine* on the tail very long, flat, sharp, ſerrate in a reverſed direction.

37. SQUALUS. *Shark.*

A. *With orifices on the temple, and anal-fin.*

141. Sq. *Canicula.* Rufous-grey, with dusky ocellate spots: nostrils surrounded with a lobe and vermiform appendage: ventral-fins distinct.

Spotted Dog-fish. *Br. Zool.* iii. *t.* 15. *Shaw* v. *t.* 152.

Body 3 or 4 feet long, white beneath: *head* ſmall, rather pointed: *eyes* oblong, pupil ſea-green: iris white: *nostrils* covered with a large angular flap: *mouth* wide, oblong, with 4 rows of teeth: *dorsal-fins* placed much behind, the ſecond opposite the tail: *tail* narrow, obliquely truncate.

2. Lobes of the nostrils double. *Edwards Glean. t.* 289.

Body with larger and fewer ſpots: *ſnout* rather longer: *tail* a little shorter; *dorsal-fins* equal.

142. Sq. *Catulus.* Reddish-grey, with numerous small dusky spots: nostrils surrounded with a lobe and vermiform appendage: ventral-fins united.

Lesser ſpotted Dog-fish. *Br. Zool.* iii. *t.* 15. *Donov. t.* 55.

Body about 2 feet long, white underneath: *head* large, rather obtuſe in front: *eyes* oblong, pupil black, iris white; *teeth* in 4 rows, ſerrate, tricuſpidate, curved inwards: *dorsal-fins* placed far behind: *tail* ſmall, slightly lunate, oblique.

143. Sq. *Galeus.* Cinereous, paler beneath: nose long, flat, pointed: teeth nearly triangular, serrate on the inner-edge.

Tope. *Ionst. pisc. t.* 8. *f.* 4. *Will. icth. t. B.* 6. *f.* 1.

Body about 3 feet long or more: *noſe* ſemitranſparent beyond the nostrils: *nostrils* near the mouth, partly covered by a flap: *temporal-orifices* very ſmall: *teeth* ſmall, numerous, in 3 rows; *vent* before the middle of the body: *tail* large, 2-lobed.

144. Sq. *Mustelus.* Brownish, beneath whitish: teeth small, numerous, obtuse: pectoral-fins smaller than the dorsal, pointed.

Smooth Hound. *Br. Zool.* iii. *t.* 16. *Shaw* v. *t.* 153.

Body about 2 feet long, slender, ſometimes varied with white ſpots, silvery beneath: *head* lengthened, a little sharpened, covered with mucous pores: first *dorſal-fin* large, nearly triangular, placed near the middle of the back; ſecond twice as large as the anal which is ſquare: *ventral* and *anal-fins* very ſmall: *tail* forked, one of the lobes twice as long and slightly lunate.

145. Sq. *Vulpes.* Lead-colour, beneath whitish: head short, conic: upper-lobe of the tail as long as the body.

Long-tailed Shark, Sea-fox. *Br. Zool.* iii. *tab.* 14.

Body including the tail 13 feet long, covered with minute ſcales:

eyes large, placed near the corners of the mouth: *teeth* in 3 rows, sharp, compressed, not ſerrate: first *dorſal-fin* large, triangular, in the middle of the back, with a triangular hollow behind it; the ſecond opposite the anal and ſomewhat 2-lobed: upper lobe of the *tail* 6 times as long as the lower and slightly falcate at the end.

B. *with the anal-fin, but no temporal orifices.*

146. Sq. *glaucus.* Blue-green, slender, beneath white: snout conic, pointed: upper-lobe of the tail 3 times as long as the lower.

Blue Shark. *Shaw Zool.* v. *t.* 151. *Bloch t.* 86.

Body 8 or 10 feet long, very slender, ſmooth: *eyes* ſmall, roundish; iris yellowish-white: *mouth* wide, placed far beneath: *teeth* in 3 or 4 rows, nearly triangular, sharp, not ſerrate: *vent* near the tail: first *dorſal-fin* about the middle of the back, glaucous, nearly triangular: *pectoral* large, long, emarginate: *anal* white: *tail* glaucous, 2-lobed, the upper-lobe above twice as long as the lower and pointed.

147. Sq. *Cornubicus.* Deep blue, beneath white: body thick, round, depressed and angular towards the tail: snout conic, prominent: lobes of the tail nearly equal.

Probeagle Shark. *Borl. Cornw. t.* 26. *Linn. Trans.* 3. *p.* 80. *t.* 15.

Body about 4 feet long, with numerous ſmall pores from the noſe to the eyes each side: *eyes* large, pupil black, iris white: *nostrils* lunar: *upper-jaw* with 2 or 3 rows of teeth, the 2 middle-ones in front standing single; lower-jaw with a triple row in front, the inner-row bent inwards, the rest turned outwards: *teeth* sharp, 2-edged, with an acute proceſs at the baſe both sides: *fins* bluish before, whitish behind: first *dorſal-fin* triangular, opposite the pectoral; the ſecond, *ventral* and *anal* very ſmall; between the ventral-fins a longitudinal aperture: *tail* lunate, the upper lobe a little longer, with a raiſed ridge each side the body near it, and a lunate hollow just above it with the points turning downwards.

2. Beaumaris Shark. *Br. Zool.* iii. *p.* 118. *tab.* 17.

Body entirely lead-colour, thicker and not tapering so much at the extremities: *tail* slightly lunate, with the horns unequal, and a tranſverſe indentation above and below.

148. Sq. *Maximus.* Deep lead-colour, beneath white: teeth numerous, small, conic-subulate, not serrate.

Basking Shark. *Br. Zool.* iii. *t.* 13. *Shaw* v. *t.* 149. 150.

Body growing to a vast size, rough, tapering to both ends, the upper-jaw much longer and rather obtuſe: *teeth* a little incurved at top: *dorsal-fin* very large, rather nearer the head, the ſecond opposite the ventral: *anal-fin* very ſmall: *tail* lunate, the upper horn much longer than the lower.

149. Sq. *Carcharias.* Pale-grey with rather acute snout: teeth triangular, serrate.

White Shark. *Shaw Zool.* v. *t.* 148. *Will. ichth. p.* 47. *t. B.* 7.

This most dreadful inhabitant of the ocean grows to a vast size: *body* rough, a little darker on the back: *head* depressed, broad, ending in a short and rather pointed ſnout: *mouth* vast, furnished with about 6 rows of strong moveable teeth: *eyes* oblong, greenish, half covered with a membrane: *nostrils* double, half covered with a membrane: *fins* rather dusky, the pectoral of vast size, nearly triangular and ſomewhat falcate: first *dorsal-fin* very large, before the middle of the body, rather rounded on the upper-part; the ſecond before the anal, and placed midway between the ventral and tail : *ventral* and *anal* ſmall : *tail* 2-lobed, the upper lobe rather pointed, the lower ſomewhat rounded.

C. *Without the anal-fin.*

150. Sq. *Acanthias.* **Grey-brown, beneath white : dorsal fins with each a strong triangular spine before it.**

Picked Dog-fish. *Donovan's Fishes, tab.* 82. *Bloch t.* 85.

Body 3 or 4 feet long, slender, ſometimes with a few white ſpots : *head* flat, slender, obtuſe in front; *eyes* lateral, oblong, bluish-white with a temporal orifice behind each, near which are 4 rows of moist pores : *nostrils* double : *teeth* numerous, ſmall, sharp, in 2 or 3 rows ; *fins* dusky ; *tail* forked, pointed, the upper-lobe twice as long as the lower.

151. Sq. *Squatina.* **Head flat, rounded in front : mouth terminal : nostrils bearded : down the back a prickly tubercled line.**

Angel Shark. *Br. Zool. t.* 12. *Donov. t.* 19. *Shaw* v. *t.* 155.

Body growing to a large size, rough and pale grey above, white beneath : *head* nearly circular, broader than the body : *mouth* broad, with protrusile jaws : *teeth* sharp, in numerous rows : *tongue* broad, pointed, ſmooth, thin : *nostrils* placed at the edges of the jaws, covered with a membrane, and each with 2 beards before them : *eyes* ſmall, glaucous, iris yellow, with a ſemilunar temporal orifice behind each : *pectoral-fins* very large, notched in front : *ventral* near them and rather leſs : *dorsal* ſmall, both placed near the tail : *tail* slightly lunate, oblique.

38. CHIMÆRA.

152. Ch. *monstrosa.* **Silvery, varied with brown above ; ſnout with porous folds.**

Sea Monster. *Shaw Zool.* v. *t.* 157. *Berkenh. syn. p.* 61.

Body 3 or 4 feet long, compressed, tapering to the tail : *head* large conical, with a fringed tuft-like proceſs at top in the male : *mouth* with a pair of broad plates in each jaw, notched along the edge, with tranſverſe undulations and pores reaching round the eyes and continued upwards along the side of the head, and branching off on the nape behind the eyes : *eyes* large ; iris white, pupil glaucous, *lateral-line* whitish with brown edges : *fins* yellowish-brown with darker shades : first *dorſal-fin* triangular, with a long ſpine before it, ſerrate on the inside ; ſecond shallow ; third cloſe to this and running down the tail ; *pectoral* and *ventral-fins* large, nearly triangular ; the latter with a cylindrical rough process at the baſe of each in the male ; *tail* continued into a slender filament, longer than the body.

39. ACIPENSER. *Sturgeon.*

153. A. *Sturio.* **Grey with dusky variations, beneath white : body rough, with 5 rows of spinous tubercles : lips cloven.**

Common Sturgeon. *Br. Zool. t.* 19. *Donov. t.* 65. *Shaw t.* 159.

Body growing to 18 or 19 feet long, slender, 5-sided, rough with ſmall tubercles ; *ſnout* lengthened, rather obtuſe, with the beards nearer the tip than the mouth : *head* clothed with long plates : *mouth* bordered with thick cartilaginous lips : *gill-covers* a single radiate bone : larger *tubercles* bony, pointed, radiate, in 5 rows, one down the back, one down each of the sides, and one each side the edge of the belly : *belly* flat : *dorſal-fin* single, ſmall, near the tail : *pectoral-fins* oval : *ventral* and *anal*, just above and below the dorſal : *tail* forked, the upper-lobe longer and pointed.

40. LOPHIUS. *Angler.*

154. **L. *piscatorius.* Brownish, beneath whitish, depressed, simply fringed round the edges of the head and sides.**

Frog-fish, Sea Devil. *Br. Zool. t.* 18. *Shaw* v. *t.* 161. *Donov. t.* 101.

Body 4 or 5 feet long, very thick and large in front, tapering to the tail: *head* rounded in front, the lower-jaw longer, the upper with a horny bristle before the eyes, and furniſhed with ſeveral long cirri: *eyes* large, iris radiate with white and brown: *teeth* sharp, numerous, both in the jaws palate and tongue: *dorſal-fin* on the lower part of the back, 10-rayed; *pectoral* large, rounded, ſcolloped, 24-rayed; *ventral* short, rigid, palmate, white, 5-rayed; *anal* near the tail, 9-rayed: *tail* rounded, 8-rayed.

41. CYCLOPTERUS. *Sucker.*

155. **C. *Lumpus.* Blackish-olive, beneath red: body angulate by 7 rows of sharp bony tubercles.**

Lump Sucker. *Br. Zool. t.* 21. *Donovan. t.* 10. *Shaw* v. *t.* 106.

2. Back very high, pyramidal. *Shaw. Zool.* v. *t.* 166.

3. Blue, silvery-green, and roſy. *Nat. Miscell. t.* 10.

Body 18 or 19 inches long, rough with tubercles, deep and thick, sharp and raised on the back, flat on the belly: *head* short, sloping: *iris, lips, mouth* and *tongue* red: *nostrils* single, tubular, near the mouth: *orb* of adhesion oval, ſurrounded with thread-like appendages: *fins* reddish; *dorſal* near the tail 11-rayed; *pectoral* 20; *ventral* 6; *anal* 10; *tail* nearly even, 12-rayed.

156. **C. *Liparis.* Brownish with blackish spots, beneath white: first ray of the ventral-fin elongated, pectoral ventral and anal united.**

Unctuous Sucker. *Br. Zool.* iii. *t.* 21. *Shaw* v. *t.* 166.

2. Cheſnut, with whitish undulate lines. *Donov. t.* 47.

Body about 5 inches long, taper, ſoft unctuous and ſemitranſparent, ſoon dissolving, brown with darker lines: *belly* protuberant above the vent: *upper-lip* with 2 short cirri, a little longer than the lower: *nostrils* double: *orb* of adhesion round, bluish, with 12 radiate ſpots: *fins* brownish; *dorsal* 36-rayed; *pectoral* 32; *ventral* 6; *anal* 26; *tail* rounded, 12-rayed.

157. **C. *Montacuti.* Conical, transparent, rosy with roundish brown spots: ventral and anal-fins not reaching to the tail.**

Diminutive Lump Sucker. *Donovan's British Fishes, t.* 68.

Body hardly an inch long, pale with a pink tinge, marked with numerous distinct roundish purplish-brown ſpots: *head* large, rather inflated about the gills, contracting a little in front, gradually decreasing to the tail: *pupil* black; iris silvery: *gill-covers* dusky; *orb* of adhesion ovate, radiate: *dorsal* and *anal-fins* long, reaching nearly to the tail; *pectoral* 17 or 18-rayed: *anal* about 32; *tail* rounded, with 2 dark bands, 15-rayed.

158. **C. *bimaculatus.* Pale rosy, with a purple spot surrounded by a white ring on each of the sides: head flattish, rather pointed in front:**

Bimaculated Sucker. *Br. Zool. t.* 22. *Donov. t.* 78.

Body about an inch and a half long, pink and white in minute ſpots: *head* broad, tapering in front and to the tail: *mouth* ſmall: *teeth* ſmall, regular: *eyes* large, pupil dark-blue, iris pink with a gold inner circle: *dorsal-fin* short, nearer the tail, 5-rayed; *pectoral* broad, 11-rayed; *ventral* 4; *anal* opposite the dorsal, 5; *tail* narrow, slightly rounded, 12-rayed.

159. C. *ocellatus*. **Livid-brown with obscure spots, tapering behind: snout projecting: before each eye a pair of beards: nape with 2 large ocellar spots.**

Ocellated Sucker, Jura S. *Br. Zool.* iii. *t.* 22. *Donov. t.* 76.

Body about 4 inches long, ſometimes paler with the spots more distinct: *head* broad, tapering to the ſnout which is obtuſe and red: *iris* blue, with 2 deep red cirri under each eye: *nape* with 2 large obovate purplish ſpots, each incloſed within a broad pale ring, and having a blue pupil in the centre: *dorſal* and *anal-fins* reaching cloſe to the tail, red, the former 11-rayed, the latter 10; *pectoral* pale, 17; *tail* red, a little rounded, 6-rayed.

42. CEPHALUS. *Sun-fish.*

160. C. *brevis*. **Brown, beneath silvery: body nearly as deep as it is long: aperture of the gills ovate.**

Short Sun-fish. *Br. Zool. t.* 12. *Donovan t.* 25. *Shaw* v. *t.* 175.

Body growing to a large size, nearly orbicular, rough with small tubercles, edged behind with a shallow fin: *mouth* ſmall, projecting, filled with ſmall obtuſe unequal teeth in the lower-jaw: *eyes* black: *iris* yellow: aperture of the *gills* oval, with the rounded pectoral-fins just behind: *dorſal* and *anal-fins* opposite and joined to the tail: *dorſal-fin* 13-rayed; *anal* 16; *pectoral* 12; *tail* ſurrounding the hind-part of the body, 14-rayed.

161. C. *oblongus*. **Dusky, beneath silvery: body nearly thrice as long as it is deep: aperture of the gills semilunar.**

Oblong Sun-fish. *Br. Zool.* iii. *t.* 19. *Donovan. t.* 61.

Body reſembling the former, but is of a more lengthened shape, reſembling a fish cut off in the middle, and between the eyes and pectoral-fins are a few dusky streaks pointing downwards: the aperture of the *gills* is alſo lunate, and not oval: *dorſal-fin* 12-rayed; *pectoral* 14; *anal* 15; *tail* 17-rayed.

43. TETRODON.

162. T. *stellatus*. **Above blue, beneath silvery: prickles of the belly arising from a stellated root of 4 rays.**

Stellated Tetrodon. *Br. Zool. t.* 20. *Donovan t.* 66. *Shaw t.* 177.

Body about 12 inches long, taper, capable of dilating the belly to a great size: *prickles* of the belly orange, sharp, covering the whole space of the belly as far as the anal-fin: *dorsal-fin* opposite the anal, 11-rayed; *pectoral* 14; *anal* 10; *tail* even, with a slight projection in the middle, with 6 branched rays.

44. SYNGNATHUS. *Pipe-fish.*

163. S. *Acus*. **Body 7-sided, yellowish-white with transverse brown bands: tail radiate, snout narrower than the head.**

Needle-fish. *Br. Zool. t.* 23, *Shaw* v. *t.* 179.

Body 12 to 15 inches long, very slender, quadrangular at the tail, covered with finely striate plates: *ſnout* a little compressed, not ſo broad as the head: *nape* carinate, the aperture of the gills on the right side: *belly* strongly carinate, making the body distinctly 7-sided: *vent* nearer the head: *dorsal-fin* ſpotted, 38-rayed: *pectoral* 14; *anal* 6; *tail* rounded, 10-rayed.

164. S. *Typhle*. **Body 6-sided: tail radiate: snout as wide as the head.**

Shorter Pipe-fish. *Br. Zool. t.* 23. *Donovan t.* 56. *Shaw t.* 179.

Reſembles the last, but is shorter, the belly but slightly carinate, giving it the appearance of being 6-sided only; the ſnout broad and compressed; and the dorſal-fin is not ſpotted: *dorſal-fin* 41; *pectoral* 12; *anal* minute, 3; *tail* 12-rayed.

165. S. *pelagicus.* **Yellow-brown, with narrow transverse brown bands: body 7-sided, without anal-fin: tail radiate.**

Pelagic Pipe-fish. *Donovan's Brit. Fishes, t.* 58.

Body 5 or 6 inches long, linear: *snout* narrow: *dorſal-fin* 23-rayed; *pectoral* 14; *tail* minute 10-rayed.

166. T. *barbarus.* **Body 6-sided, without anal fin or radiate tail.**

Little Pipe-fish. *Br. Zool.* iii. *tab.* 23. *n.* 61.

Body olive-brown, with bluish longitudinal lines; reſembles the last, except that the tail tapers to a point and has no radiate fin: *dorſal-fin* 40-rayed; *pectoral* very minute, 12-rayed.

167. S. *Ophidion.* **Body nearly cylindrical, without pectoral or anal-fin, or radiate tail.**

Sea Adder. *Br. Zool.* iii. *t.* 23. *n.* 62. *Shaw* v. *t.* 179.

Body slender, tapering to a point, dull greenish-grey, with a short turned up ſnout.

45. CENTRISCUS.

168. C. *Scolopax.* **Red, beneath golden, rough with pointed scales: first-ray of the first dorsal-fin very long, and serrate on the inside:**

Snipe-fish, Trumpet-fish. *Donovan's Brit. Fishes, tab.* 63.

Body 6 or 7 inches long, of a longish-oval shape, more or leſs red with a golden tinge on the sides and belly, rough with hard pointed cloſely imbricate ſcales: *snout* a little recurved, ending in a narrow mouth: *eyes* large, lateral; iris pale red: *nostrils* double, near each other: first *dorſal-fin* 4-rayed; the first ray thick, long, ſerrate on the inside, and placed in a ſmall hollow; the ſecond 9-rayed; *ventral* ſmall, concealed in a long hollow, 7; *anal* opposite the dorſal, 13; *tail* rounded, 15-rayed.

CLASS V. VERMES. *WORMS.*

ORDER I. INTESTINA.

Naked simple animals, without limbs.

A. *Found within other animals: without eyes.*

1. **Ascaris.** *Body* round elastic, tapering towards each end: head with 3 vesicles: *intestines* pellucid, white, spiral.
2. **Trichocephalus.** *Body* round, elasic, variously twisted, much thicker in front and furnished with a slender protrusile proboscis: *tail* long, capillary, tapering to a fine point.
3. **Filaria.** *Body* round, filiform, of equal thickness, quite smooth: *mouth* dilated, with a roundish concave lip.
4. **Echinorinchus.** *Body* round: *mouth* with a cylindrical retractile proboscis, crowned with hooked prickles.
5. **Faciola.** *Body* flattish, with an aperture or pore at the head, and generally another at a distance beneath.
6. **Taenia.** *Body* flat, composed of numerous joints: head with 4 orifices for suction a little below the mouth: *mouth* terminal, generally crowned with a double series of retractile hooks.

B. *Not inhabiting the bodies of other animals.*

a. *Furnished with a lateral pore.*

7. **Lumbricus.** *Body* round, annulate, with generally a fleshy belt near the head, mostly rough with minute concealed prickles placed longitudinally.
8. **Sipunculus.** *Body* round, elongated: *mouth* cylindrical, terminal, narrower than the body: *aperture* at the side of the body, wart-like.
9. **Planaria.** *Body* flattish, pointed behind, gelatinous, with a double ventral pore, proceeding with a slow and uniform motion: *mouth* terminal.
10. **Hirudo.** *Body* oblong, truncate at each end, cartilaginous, unarmed, moving by dilating the head and tail and contracting itself into an arch.

b. *Without the lateral pore.*

11. **Lineus.** *Body* a little depressed, linear, smooth: *mouth* longitudinal, placed underneath.
12. **Gordius.** *Body* round, filiform, of equal thickness, smooth.

ORDER II. MOLLUSCA.

Naked simple animals, furnished with limbs.

13. **Actinia.** *Body* fixed by the base, warted, contractile, with a single terminal mouth above surrounded by numerous cirri.

14. **Ascidia.** *Body* fixed by the base, smooth roundish, apparently issuing from a sheath, with 2 terminal apertures, one placed beneath the other, and radiate with simple cirri.

15. **Derris.** *Body* detached, cylindrical, composed of articulations: *mouth* terminal: *head* with 2 simple cirri at top.

16. **Holothuria,** *Body* detached, cylindrical, open at the extremity: *mouth* terminal, surrounded by branched cirri.

17. **Terebella.** *Body* oblong, creeping, often inclosed in a tube, furnished with lateral fascicles and branchiæ: *mouth* terminal, with lips but no teeth, protruding a clavate proboscis, and surrounded by numerous ciliate capillary cirri.

18. **Limax.** *Body* oblong, creeping, with a fleshy shield above, and a longitudinal flat disk beneath: *aperture* placed on the right side, within the shield: *feelers* 4, above the mouth, with an eye at the tip of each of the larger-ones.

19. **Aplysia.** *Body* creeping, covered with reflected membranes, with a membranaceous shield covering the lungs: *aperture* on the right side: *vent* above the extremity of the back: *feelers* 4, resembling ears.

20. **Doris.** *Body* creeping, oblong, flat beneath: *mouth* placed below, on the fore-part: *vent* behind the back, surrounded by a fringe: *feelers* 2 or 4, seated above in front, retractile within their proper receptacles.

21. **Nereis.** *Body* creeping, long with numerous lateral peduncles or feet each side: *feelers* simple, rarely none: *eyes* 2 or 4, rarely none.

22. **Aphrodita.** *Body* creeping, oblong, covered with scales, and furnished with numerous bristly fascicled feet each side: *mouth* terminal, cylindrical, retractile: *feelers* 2, setaceous, annulate: *eyes.* 4.

23. **Amphitrite.** *Body* projecting from a tube, annulate, furnished with numerous small feet each side: *feelers* 2, approximate, feathered: *eyes* none.

24. **Spio.** *Body* projecting from a tube, jointed and furnished with dorsal fibres: *peduncles* or *feet* rough with bristles and placed towards the back: *feelers* 2, long, simple: *eyes* 2, oblong.

25. **Nais.** *Body* creeping, long, linear, depressed, pellucid: *feet* with small bristles each side: *feelers* none: *eyes* 2 or none.

26. **Lernaea.** *Body* oblong, roundish, naked, with 2 or 3 round tentacula or arms each side by which it attaches itself: *ovaries* 2, projecting like tails from the lower extremity.

27. **Sepia.** *Body* fleshy, receiving the breast in a sheath, with a tubular aperture at its base: *arms* 8, beset with numerous warts or suckers, and in most species 2 peduncled feelers: *head* short: *eyes* large: *mouth* resembling a parrot's beak.

28. **Triton.** *Body* oblong: *mouth* with an involute spiral proboscis: *arms* 6 each side, divided nearly to the base, the hind-ones cheliferous.

29. **Medusa.** *Body* gelatinous smooth, orbicular, generally flat or concave underneath: *mouth* underneath, central.

30. **Asterias.** *Body* depressed, covered with a coriaceous muricate crust, grooved underneath, furnished with feelers: *mouth* underneath, central, 5-valved.

31. **Echinus.** *Body* more or less orbicular, covered with a bony sutured crust, and generally clothed with moveable spines: *mouth* underneath, 5-valved.

ORDER III. TESTACEA. *SHELLS.*

The calcarious covering of Molusca.

A. *With more than two valves.*

32. **Chiton.** *Inhabitant* of the shell a Doris: *shell* consisting of several plates or valves disposed transversely down the back, and incumbent on each other at their anterior edge.

33. **Balanus.** *Inhabitant* a Triton: *shell* affixed by the base, of many erect unequal valves.

34. **Lepas.** *Inhabitant* a Triton: *shell* affixed by a fleshy peduncle, of several unequal valves connected by a cartilage.

35. **Pholas.** *Inhabitant* an Ascidia: *shell* with 2 large valves open at each end, and smaller accessory-ones at or near the hinge.

B. *With 2 valves.*

36. **Mya.** *Inhabitant* an Ascidia: *shell* generally gaping an one end: *hinge* mostly with a strong thick broad tooth not inserted into a groove in the opposite valve.

37. **Solen.** *Inhabitant* an Ascidia: *shell* oblong, open at both ends: *hinge* with a reflected subulate tooth, often double, not inserted into a groove in the opposite valve.

38. **TELLINA.** *Inhabitant* a Tethys: *shell* generally sloping and somewhat curved on one side: *hinge* with generally 3 teeth, the lateral-ones in one valve flat or nearly obsolete.

39. **CARDIUM.** *Inhabitant* a Tethys: *shell* of equal convex valves, ribbed or striate longitudinally, toothed round the edges: *hinge* with 2 teeth near the beak, and a larger remote one on each side, each locking into the opposite valve.

40. **MACTRA.** *Inhabitant* a Tethys: *shell* with equal valves, unequal at the sides: *hinge* with the middle tooth complicated, with a small hollow each side; the lateral-teeth remote and locking into the opposite valve.

41. **DONAX.** *Inhabitant* a Tethys: *shell* with the anterior margin very obtuse and generally crenulate: *hinge* with 2 teeth in the middle, and a single remote lateral one.

42. **VENUS.** *Inhabitant* a Tethys: *shell* with the anterior margin of the lip of one valve generally incumbent on the other: *hinge* with 3 teeth, all close together, the lateral-ones diverging from their tips.

43. **CHAMA.** *Inhabitant* a Tethys: *shell* strong, rather coarse; *hinge* rugged, gibbous, the teeth obliquely locking into the opposite valve.

44. **ARCA.** *Inhabitant* a Tethys: *shell* of equal valves: *hinge* with numerous sharp teeth alternately locking between each other.

45. **PECTEN.** *Inhabitant* a Tethys: *shell* of unequal valves, mostly ribbed or striate longitudinally, with an ear-like process on one or both sides the hinge: *hinge* without teeth, but furnished with a small somewhat triangular hollow.

46. **OSTREA.** *Inhabitant* a Tethys: *shell* of unequal rugged or plaited valves without the ear-like process: *hinge* without teeth, with a transverse striate cavity.

47. **ANOMIA.** *Inhabitant* not reducible to any genus of Mollusca: *shell* of unequal valves, one of them flattish and mostly perforated near the base, the other convex at the base with a produced beak: *hinge* a transverse linear prominence on the flat valve connected by a strong cartilage under the beak of the opposite valve.

48. **MYTILUS.** *Inhabitant* allied to an Ascidia: *shell* generally affixed by a beard of silky filaments: *hinge* without teeth, marked by a longitudinal groove which is sometimes crenulate.

49. **PINNA.** *Inhabitant* allied to an Ascidia: *shell* fra

gile, gaping at one end, fixed by a beard of silky filaments: *hinge* without teeth, the valves connected on one side nearly the whole length.

C. *With a single valve, and more or less spiral.*

50. **Nautilus.** *Inhabitant* obscure, *shell* divided into several compartments or cells communicating with each other by a small aperture.

51. **Cypræa.** *Inhabitant.* a Limax: *shell* involute, rather ovate, smooth, obtuse at each end: *aperture* linear, extending the whole length of the shell, and toothed on both sides.

52. **Bulla** *Inhabitant* allied to a Limax: *shell* convolute, without teeth: *aperture* more or less contracted, longitudinal, oblong, entire at the base: pillar oblique, smooth.

53. **Voluta.** *Inhabitant* a Limax: *shell* spiral: *aperture* longitudinal, reaching nearly the whole length of the shell, without beak: *pillar* twisted or plaited, without perforation or interior lip.

54. **Buccinum.** *Inhabitant* a Limax: *shell* spiral, gibbous: *aperture* ovate, ending in a short canal leaning to the right, with a retuse beak or projection.

55. **Strombus.** *Inhabitant* a Limax: *shell* spiral: *aperture* much dilated, the lip expanding and produced into a canal leaning to the left.

56. **Murex.** *Inhabitant* a Limax: *shell* spiral, mostly rough with membranaceous folds or knobs: *aperture* oval, ending in a straight entire canal, sometimes slightly reflected.

57. **Trochus.** *Inhabitant* a Limax: *shell* spiral, more or less conic: *aperture* somewhat angular or rounded, transversely contracted: *pillar* placed obliquely.

58. **Turbo.** *Inhabitant* a Limax: *shell* spiral, solid: *aperture* contracted, orbicular, entire.

59. **Helix.** *Inhabitant* a Limax: *shell* spiral, more or less transparent, brittle: *aperture* contracted, roundish-oval, or semilunar.

60. **Nerita.** *Inhabitant* a Limax: *shell* spiral, gibbous, flattish beneath: *aperture* semiorbicular: *pillar-lip* transverse, flattish and truncate.

61. **Haliotis.** *Inhabitant* a Limax: *shell* dilated, ear-shaped, with a longitudinal row of orifices along the disk: *spire* lateral, flat upon the shell.

D. *With a single valve, and without spire.*

62. **Patella.** *Inhabitant* a Limax: *shell* more or less conic, shaped like a bason, mostly without spire.

63. **Dentalium.** *Inhabitant* a Terebella: *shell* tubular, detached, straight or slightly curved, not divided into chambers, pervious, and open at both ends.

64. **Vermiculum.** *Inhabitant* allied to a Terebella: *shell* variously shaped, not attached to other bodies.

65. **Serpula.** *Inhabitant* a Terebella: *shell* tubular, affixed to other bodies, generally separated internally by divisions at irregular distances.

66. **Teredo.** *Inhabitant* allied to a Terebella: *shell* cylindrical, taper, flexuous, lodged in wood, with 2 testaceous hemisphærical valves covering the head of the animal and truncate anteriorly, and 2 lanceolate ones near the tail.

67. **Sabella.** *Inhabitant* various: *shell* tubular, composed of particles of sand, broken shells, and other substances, united by a glutinous cement.

ORDER IV. ZOOPHYTA.

Composite animals, efflorescing like vegetables.

A. *With a hard calcarious stem.* Lithophytes.

68. **Madrepora.** *Animal* resembling a Medusa: *coral* with lamellar star-like cavities.

69. **Millepora.** *Animal* a Hydra or Polype: *coral* mostly branched, and covered with cylindrical turbinate pores.

70. **Cellepora.** *Animal* a Hydra or Polype: *coral* somewhat membranaceous, composed of round cells.

71. **Isis.** *Animal* growing in the form of a plant: *stem* stony, jointed; the joints striate longitudinally, united by spongy or horny junctures, and covered with a soft porous cellular flesh or bark: *mouths* beset with oviparous polypes.

B. *With a softer stem.* Zoophytes.

72. **Gorgonia.** *Animal* growing in the form of a plant: *stem* coriaceous, corky, woody, horny or bony, composed of glassy fibres; or stony, striate, taper, dilated at the base, covered with a vascular or cellular flesh or bark, and becoming spongy and friable when dry: *mouths* or *florets* covering the surface of the stem and polype-bearing.

73. **Alcyonium.** *Animal* generally growing in the form of a plant: *stem* fixed, fleshy, gelatinous, spongy; or coriaceous, covered with polype-bearing stellate cells.

74. **Spongia.** *Animal* fixed, flexile, torpid, of various forms, composed either of reticulate fibres or masses of small spines interwoven together, and clothed with a gelatinous flesh full of small mouths on its surface, by which it absorbs and rejects water.

75. **Flustra.** *Animal* a Polype proceeding from porous cells: *stem* fixed, foliaceous, membranaceous, consist-

ing of numerous cells united together and interwoven like a mat.

76. **Tubularia.** *Stem* tubular, simple or branched, fixed by the base: *animal* proceeding from the end of the tube, and having its head crested with tentacula.

77. **Corallina.** *Animal* growing in the form of a plant: *stem* fixed, with calcarious subdivided branches, mostly jointed.

78. **Sertularia.** *Animal* growing in the form of a plant: *stem* branched, producing polypes from cup-shaped denticles or minute cells.

79. **Pennatula.** *Animal* detached, of various shapes, supported by a bony part within, naked at the base, the upper-part with generally lateral ramifications furnished with rows of tubular denticles producing radiate polypes from each tube.

80. **Hydra.** *Animal* fixing itself by the base, linear, gelatinous, naked, contractile, furnished with setaceous tentacula or feelers, inhabiting fresh waters, and producing its deciduous offspring or eggs from the sides.

ORDER V. INFUSORIA.

Minute animalcules, seldom visible to the naked eye.

81. **Brachionus.** *Body* contractile, covered with a shell, and furnished at the head with ciliate rotatory organs.

82. **Vorticella.** *Body* contractile, without shell, furnished with ciliate rotatory organs.

83. **Trichoda.** *Body* invisible to the naked eye, transparent, hairy or horned.

84. **Cercaria.** *Body* invisible to the naked eye, transparent, furnished with a tail.

85. **Leucophra.** *Body* invisible to the naked eye, every where ciliate.

86. **Bursaria.** *Body* quite simple, membranaceous, hollow like a purse.

87. **Gonium.** *Body* invisible to the naked eye, quite simple, flat and angular.

88. **Colpoda.** *Body* invisible to the naked eye, quite simple, transparent, flat and sinuate.

89. **Paramecium.** *Body* invisible to the naked eye, quite simple, flattened, oblong.

90. **Cyclidium.** *Body* invisible to the naked eye, quite simple, transparent, flat, orbicular or oval.

91. **Vibrio.** *Body* invisible to the naked eye, quite simple, cylindrical and elongated.

62. **Bacillaria.** *Body* consisting of cylindrical straw-

like filaments. placed parallel with each other, and frequently changing their position.

93. **Enchelis.** *Body* invisible to the naked eye, quite simple, cylindrical.

94 **Volvox.** *Body* invisible to the naked eye, quite simple, transparent, spherical.

95. **Monas.** *Body* invisible to the naked eye, most simple, transparent, resembling a point.

ORDER I. INTESTINA. *INTESTINE.*

1. ASCARIS. *Ascarides.*

1. A *vermicularis.* Head subulate: skin at the sides of the body very finely crenulate or wrinkled.

Barbut's Worms. t. 1. f. 6. Mem. Lond. Med. Soc. v. *p.* 230. *t.* 2.

In the human intestines. *Body* about half an inch long, a little dilated in the middle and wrinkled at the sides, pellucid and angular: *head* nodoſe, divided into three veſcicles, in the middle of each of which there is an aperture or mouth: *tail* gradually tapering to a point: *vent* below the middle. *Female* with a ſmall perforation a little below the head, through which the young are protruded.

2. A. *lumbricoides.* Head slightly incurved, with a transverse contraction beneath it: mouth triangular.

Barbut's Worms, t. 1. *f.* 7. *Mem. Lond. Med. Soc.* v. *t.* 1.

In the human intestines. *Body* 12-15 inches long, tranſparent, light yellow with a faint line down the side, differing from the earthworm in wanting the fleshy ring below the head, and in having 3 vesicles: *head* 3-lobed, with a triangular aperture between them: *trunk* a little wrinkled, with a circular depression about the middle, in which is a small punctiform aperture: *tail* ſubulate: *vent* large, below the middle of the body.

3. A. *Canis.* Head flattened, winged each side with a membrane: spermatic vessels curled: tail pointed.

In the intestines of the Dog. *Redi. Opusc.* 3. *t.* 17. *f.* 3.

A. *Felis.* Head with a greyish-white oblong vesicle each side, which is obtuse and pellucid on the hind-part.

In the Cat. *Redi anim. viv. in an. viv. t.* 13 *f.* 8.

4. A. *Cati.* Head without the oblong vesicles each side.

In the intestines of the Cat. *Goeze Eingew, p.* 80.

5. A. *Equi.* Body whitish, cylindrical, large, taper.

In the Horſe. *Goeze Eingew. p.* 62. *t.* 1. *f.* 1-3.

Body often a foot and a half long, and as thick as a man's little finger, ſometimes marked with large brown patches.

6. A. *Carbonis* In the crop of the Pelecanus Carbo.

Tranſact. Linn. Society v. *p.* 24.

Body yellowish-brown, coiled up into a ball or maſs.

7. A. *Pelecanus.* In the crop of the Pelecanus cristatus.

Reſembles the last. *Trans. Linn. Soc.* v. *p.* 24.

8. A. *marina.* Body filiform, whitish, smooth, twisted spirally and lying flat: intestine tubular.

In marine fish. *Br. Zool.* iv. *tab.* 20. *f.* 3. Gordius.

9. A. *lacustris*. Body lying flat, spirally twisted, tapering to both extremities.

In the intestines of the Stickleback, and liver of the Pike.

2. TRICHOCEPHALUS.

10. Tr. *Hominis*. Body slightly crenate above, smooth underneath, very finely striate on the fore-part.

In the human intestines. *Mem. Lond. Med. Soc.* v. *t.* 3.

Body about 2 inches long, pale: *head* obtuſe, furniſhed with a very ſlender proboſcis, which it can protrude and retract at pleaſure: *tail* or thinner-part twice as long as the thicker end, terminating in a fine hair-like point.

11. Tr. *Equi*. Found in the intestines of the horse.

Goeze Eingew. p. 118. *tab.* 6. *f.* 8.

Reſembles the last but is ſomething longer.

3. FILARIA.

12. F. *Scarabæi*. Found in the Scarabæus fimetarius.

Philoſophical Tranſact. 1. *p.* 49.

13. F. *Carabi*. Found in the Carabus.

Lister Philoſop. Trans. n. 81.

4. ECHINORINCHUS.

14. E. *candidus*. Body pale, opake, slightly wrinkled.

In fish. *Mull. Zool. Dan.* 1. *p.* 139. *t.* 37. *f.* 7-10.

Body about 3 inches long, and nearly of equal thickness, pale grey, yellowish, saffron, brown, fulvous, reddish or violet, according to the different ſpecies in which it has been nouriſhed: *proboſcis* with 9-15 rows of hooks, each row of 9-16 hooks.

5. FASCIOLA. *Fluke. Gourd-worm.*

15. F. *Hepatica*. Body ovate, ending in a short tube on the fore-part, with a tubercle beneath it containing a triangular cavity.

Linn. Trans. 2. *t.* 25. *f.* 17, 18, 19. *Barbut t.* 2. *f.* 1.

In ditches, and the liver of sheep and dogs. *Body* about an inch long, pointed behind, with generally a white line down the middle and ſpot in the centre: *back* a little convex, and marked with about 8 longitudinal grooves in 2 series.

16 F. *intestinalis*. Body oblong, cylindrical, tapering and obtuse at the base: neck round, slightly incurved.

Mull. Zool. Dan. t. 2. *f.* 10. 11. *Barbut Worms, t.* 2. *f.* 2.

In the intestines of Breams and Sticklebacks. *Body* white: *lateral-pore* ſeated at the baſe of the neck: *oviducts* oblong, brown.

6. TÆNIA. *Tape-worm.*

A. *Mouth armed: body with a vesicle behind.*

17. T. *visceralis*. Pisiform, inclosed in a vesicle, broad on the fore-part and pointed behind.

Phil. Trans. 43. *p.* 305 *f.* 1--8 *Goeze Eing. t.* 20. *B. f.* 12. *a. b.*

In the liver, placenta, ſack containing the hydropic fluid and other morbid tumours of mankind: ſometimes ſolitary, ſometimes many together in the ſame veſicle.

18. T. *cellulosæ*. Solitary, inclosed in a cartilaginous vesicle and 2-tailed tunic.

Werner Verm. inteſt. p. 2. *t.* 1. *fig.* 1--8.

In the cellular covering of the human muſcle, and is very tenacious of life: about an inch long, half as broad, and a fourth thick: *head* furniſhed with obtuſe hooks.

B. *Mouth armed: body without the terminal veſicle.*

19. T. *Solium.* Articulations long and narrower, with marginal mouths, one on each joint and generally alternate: ovaries arboreſcent.

Linn. Trans. 2. *t.* 25. *f.* 1---8. *Mem. Lond. Med. Soc.* v. *t.* 4.

In the inteſtines of mankind, ſolitary or in conſiderable numbers. *Body* from 3 to 50 or 60 feet long, conſiſting of a number of diſtinct joints appearing as if ſheathed in one another, each joint with a lateral marginal pore by which it attaches itſelf to the inteſtines: *head* with a terminal mouth ſurrounded with 2 rows of radiate hooks or holders, and a little beneath on the flattened ſurface 2 tubercled orifices or suckes each ſide: *tail* ending in a ſemicircular joint without aperture.

20. T. *vulgaris.* Articulations ſhort and broader, with a mouth in the centre of each: ovaries ſtellate round the mouth.

Mem. Lond. Med. Soc. v. *tab.* 5. *Nat Miſcell.* 7. *t.* 241.

In the human inteſtines. *Body* from 1 to 5 yards long, often found 3 or 4 together, broader in the middle and tapering to both ends: *joints* much ſhorter and broader than the laſt, finely ſtriate longitudinally and wrinkled tranſverſely at the ſides: *head* narrower and ſmaller than the laſt: *tail* ending in a rounded joint: *ovaries* ſtellate or coral-like, placed round the mouths of the joints.

21. T. *cateniformis.* Articulations oblong-elliptic, with ſingle marginal mouths.

1. *canina.* Radii of the head not reaching to the margin. In the inteſtines of the Dog. *Linn. Trans.* 2. *t.* 25. *f.* 9.

2. *Felis.* In the Cat. *Linn. Trans.* 2. *t.* 25. *f.* 11.

Reſembles T. Solium, but the joints are of a more elliptic form, and the mouths moſtly oppoſite.

22. T. *cerebralis.* Minute, numerous, aggregate, united by their baſe to a large common veſicle diſtributed about the ſurface.

Batch. Bandw. p. 84. *f.* 34---36. *Goeze Eingew. t.* 20. *a. f.* 1---5.

In the brain, or ſpinal marrow immediately beneath the brain of ſheep, occaſioning the diſeaſe known by the name of the *Dunt* or *Rickets.* *Body* not larger than a grain of ſand, attached by 2 ligaments, armed on the head with 32--36 hooks by which they affix themſelves to the brain or its coats.

C. *Mouth unarmed.*

23. T. *lata.* White, with very ſhort and broad joints knotty in the middle, with a ſingle central mouth in each.

In the human inteſtines. *Linn. Trans.* 2. *t.* 25. *f.* 12--14.

Body 18--120 feet long, more opake thicker and broader than T. vulgaris: *joints* often half an inch broad, and not more than a line and a half long, very finely ſtirate tranſverſely: *ovaries* diſpoſed in in a roſe-like form.

24. T. *ovina.* Articulations very ſhort and narrow, rounded at the ends: lateral veſſels pellucid, diſtinct, with double marginal oppoſite mouths.

2. In the inteſtines of the Ox. *Linn. Trans.* 2. *t.* 25. *f.* 15. 16.

Body very long ,capillary on the fore-part: *mouths* one on each edge of each joint: *ovaries* radiate, and running tranſverſely over each joint.

7. LUMBRICUS. *Earth-worm.*

25. L. *terrestris* Body red, with 8 rows of prickles.

Dew-worm. *Br. Zool.* iv. *t.* 19. *f.* 6. *Barbut t.* 1. *f.* 8.

2. About half the size. *Br. Zool.* iv. *t.* 19. *f.* 6. *A.*

In the ſoil. *Body* dull red, with about 140 rings, each containing 4 pair of most minute prickles, convex each side when expanded, flattiſh when contracted, with a red canal down the whole body: *belt* wrinkled and porous: *mouth* placed beneath the proboſcis.

26. L. *marinus* Red, with 2 rows of bristly tubercles down the back.

Lug, Lob-worm. *Br Zool.* iv. *t.* 19. *f.* 7. *Barbut t.* 1. *f.* 9.

Sandy Shores. *Body* pale red, ſoft, annulate with larger and ſmaller rings, the larger with 2 tufts of short bristles: *mouth* round.

27. L. *Thalassema.* Body striate, dirty-red with shining red spots, beneath grey: mouth surrounded with a funnel-like tube, which is wrinkled within and plaited at the margin.

Pall. Miscel. Zool. t. 11. *f.* 9. *Spic. Zool. t.* 1. *f.* 6.

On the shores of Cornwall. *Body* glabrous, mucous, thicker at one end, a little pointed at the other: *mouth* placed above, with a ſaffron funnel.

28. L. *oxyurus.* Body whitish-livid, very sharp at the hind extremity, obtuse before, with a cylindrical retractile and exsertile proboscis.

On the Suſsex Coast. *Pall. Misc. Zool. t.* 11. *f.* 7. 8.

Body about an inch and a half long, annulate with very fine striæ: *ſnout* truncate, very finely granulate, with a ſcarcely visible pore at its baſe.

8. SIPUNCULUS. *Tube-worm.*

29. S. *nudus.* Body covered with a close skin, smooth, of equal thickness at the lower extremity.

The Ocean. *Br. Zool.* iv. *t* 20. *f.* 10. *Barbut t.* 2. *f.* 3.

Body dirty-white, about 8 inches long, ſomewhat conic, deeply striate longitudinally and tranſverſely, and reticulate: *mouth* tube-like and projectile, armed with fleshy 2-pointed papillæ, beneath which is an oblong tranſverſe aperture ſurrounded by a prominent lip.

30. S. *saccatus.* Body covered with a loose skin, smooth, globular at the lower extremity.

Barbut t. 2, *f.* 4, *Linn. Trans.* 7. *p.* 75.

Body larger than the last, incloſed in a looſe membranous diaphanous skin, dilated at the lower end, and is not contracted towards the middle.

31. S. *Strombus.* Body covered with a close skin, warty below the vent.

Montague Linn. Trans. 7. *p.* 74.

Body 3 or 4 inches long, livid, ſurrounded with short feelers at the mouth: reſembles S. nudus, but is shorter, warty for a conſiderable ſpace behind the vent, not ſo ſuddenly decreasing in size above the vent, and the feelers round the mouth longer.

9. PLANARIA.

32. Pl. *nigra.* Black, depressed, linear, with a semi-pellucid whitish spot above the tail.

On aquatic plants. *Linn. Trans.* 2. *p.* 317. Hirudo.

Body deep velvet-black above and below, circular when at rest, and ſeldom above a line long, linear when in motion and extending to about 3 lines in length.

33. Pl. *alba*. White with brown ramifications, depressed, curled at the margin, rather pointed at the end.

On aquatic plants. *Linn. Trans* .2. *p.* 316. Hirudo.

Body ovate when at rest, linear and 6 or 7 lines long when in motion, tranſparent on the margin: *eyes* 2: *ovary* oblong, pointed at the ends, with uſually 2 livid ſpots.

34. Pl. *viridis*. Green with a transparent margin, depressed, oblong, pointed at the tail.

Cold Streams *Linn. Trans.* 1. *p.* 93. *tab.* 7. Hirudo.

Body about the eighth of an inch long, graſs-green, nearly circular when at rest: *eyes* 2, black: *eggs* 5 or 6, oblong, deep brown.

10. HIRUDO. *Leech.*

35. H. *sanguisuga*. Elongated, olive-brown, with an ochre-yellow marginal band.

Stagnant waters. *Barbut Worms, p.* 20. *tab.* 2. *f.* 6.

Body 4 or 5 inches long, depreſsed, ſmooth, gloſsy, above dull olive-black with a dirty yellow margin each side, beneath paler with often a few black ſpots: *tail* thicker than the head.

36. H. *medicinalis*. Elongated, olive-black, with 6 yellow-ferruginous lines above, and spotted with yellow beneath.

Stagnant waters. *Barbut Worms, p.* 19. *t.* 2. *f.* 5. Horse-leech.

Body about 2 inches long, compoſed above of numerous annular wrinkles, and marked with longitudinal variegated stripes: *mouth* ſmaller than the tail, armed with 3 cartilaginous teeth: *tail* compoſed of an annular muſcle by which it attaches itſelf.

37. H. *octoculata*. Elongated, yellow-brown, with 8 eyes in the form of a crescent.

Stagnant waters. *Act. Stockh.* 1757. *t.* 6. *f.* 5--8.

Body about an inch and a half long, ſometimes immaculate, ſometimes marked with variously coloured ſpots or lines: *eyes* often 9.

38. H. *stagnalis*. Elongated, whitish with grey dots, plaited at the sides: eyes 2.

Wet hollows. *Act. Stockh.* 1757. *t.* 6. *f.* 9--11.

Body about 9 lines long, pellucid: *eggs* about 40, ſurrounded by a tranſparent circle, grey becoming brown.

39. H. *complanata*. Dilated, grey, with a double tubercled line on the back, serrate at the sides.

Slow Streams. *Act. Stockh.* 1757. *tab.* 6. *f.* 12--14.

Body about 4 lines long, with tranſverſe bands compoſed of 3 pale lines, whitish at the edges: *head* pointed, white: *eyes* 6: *tail* orbicular.

40. H. *geometra*. Elongated, yellowish-green, with a longitudinal row of white spots.

Shallow Streams *Br. Zool*, iv. *t.* 20. *f.* 13. *Barbut t.* 2. *f.* 7.

Body about 8 lines long, ſometimes brownish, varying in colour, tapering before, very broad at the tail: *eyes* 4: *back* carinate when in motion.

41. H. *circulans*. Oblong, pointed towards the head, convex above, flat beneath, dull red.

The Thames. *Sowerby's Brit. Miſc.* *tab.* 76.

Body about an inch long when extended, convex and obscurely striate on the upper side, flat and paler beneath.

42. H. *crenata*. Slightly depressed, greenish-grey, sub-

oval, with transverse annular striæ, crenulate at the sides.

Shallow Streams. *Linn. Trans.* 2. *p.* 318. *tab.* 29.

Body about half an inch long, broad and rounded on the hind-part, tapering like a pear before, convex on the upper-ſurface, flat beneath: *eyes* 2, approximate.

43. H. *muricata.* Round, taper, annulate and tubercled, with 2 short horns on the head.

The ocean. *Br. Zool.* iv. *t.* 20. *f.* 14. *Barbut t.* 2. *f.* 8.

Body 2 or 3 inches long, strongly annulate, and tubercled on the rings: *head* larger than the tail, which is much dilated.

11 LINEUS. *Line-worm.*

44. L. *longssimus.*

The ocean. *Sowerby Miscel. t.* 8. *Borl. Cornw. t.* 26. *f.* 13.

Body many feet long, slightly tapering downwards, the third of an inch broad, black towards the head, becoming light brown with paler longitudinal streaks: *head* broader and tapering into a ſnout, emarginate, marked with a tranſverſe ſemicircular line.

12. GORDIUS. *Hair-worm.*

45. G. *aquaticus.* Pale-brown, with dark extremities.

Boggy places. *Barbut Worms, tab.* 1. *f.* 1.

Body 10 or 12 inches long, not much thicker than a horſe-hair, twisting itſelf into various knots and contortions, ſmooth, gloſsy, rarely a little slenderer at one end: *mouth* small, horizontal, with equal obtuſe jaws.

46. G. *argillaceus.* Body uniformly pale yellow.

In clay. *Barbut Worms, tab.* 1. *f.* 2.

Body hardly distinguishable from the last, except in being of an uniformly yellowish colour.

47. G. *annulatus.* Garnet-red annulate with white, with a white line down the back and another on each side.

The ocean. *Montague Linn. Trans* 7. *p.* 74.

Body 6 or 7 inches long, rounded and white at the posterior extremity, with 2 rows of minute white ſpots between the white lines encircling the trunk: front, except the upper-lip, white.

ORDER II. MOLLUSCA.

13. ACTINIA.

48. A. *equina.* Greenish, with a rosy foramen or mouth: cirri pale rosy, with an aperture at the end of each.

The ocean. *Sowerby Brit. Miſc. p.* 7. *tab.* 4.

Body greenish above, varied with orange stripes and covered with minute white ſpecks; roundish when cloſed, warted, flat at the baſe with a narrow rim, grey beneath: *mouth* ſoft, red, ſurrounded by 138 cylindrical obtuſe cirri with a red line near the baſe of each: *stomach* light brown, plaited.

49. A. *crassicornis.* Red, with thick conic cirri.

Barbut Worms, t. 5. *t.* 6. *Shaw Nat. Miſc. t.* 330.

Body pale red, tranſverſely wrinkled; *cirri* whitish at their tips.

50. A. *plumosa.* Tentacula small: the margin surrounded with pellucid cirri.

Barbut Worms, tab. 5. *fig.* 5.

Body nearly cylindrical, tranſverſely wrinkled, varying in colour, red, brown chesnut, yellow-brown, yellow-green, or white; ſometimes opake, often pellucid: divisions of the aperture white, rufous, or orange.

51. A. *effæta*. Nearly cylindrical, angularly grooved longitudinally, crenate at the base, with numerous pointed cirri.

A. maculata. *Linn. Trans.* v. *p.* 8.

Body dull red below, tranſparent white above with red ſpots, more expanded at the baſe.

52. A. *anemonoides*. Nearly cylindrical, rather short, red: interior tentacula ramified, outer-ones conic, obtuse.

Rocky coasts. *Shaw Nat. Miſcel. tab.* 26, 27.

Body with a triple concentric row of tentacula, of a yellow colour varied with red; *stomach* pale yellow, with red and pale ſea-green stripes.

53. A. *truncata* Pale reddish-yellow, conic, pellucid, glabrous.

The ocean. *Dicquem Philoſoph. Trans.* 63. *t.* 17. *f.* 13.

54. A. *Caryophillus*. Red-brown, with small pencil-form tentacula.

Martin's Marine Worms. 1. *p.* 1. *tab.* 1. *fig.* 1.

55. A. *Cereus*. Brown, longitudinally grooved: cirri numerous, slender, unretractile, sea-green with rosy tips.

Cornish coaſt. *Philoſoph. Trans.* 52. *tab.* 1. *f.* 1.

Body marked with trifurcated grooves, pale cheſnut: *cirri* long, slender, from 120 to 200 in number.

56. A. *Bellis*. Red with white warts: head resembling the calyx of a flower: cirri short, retractile, variegated.

Cornish coast. *Phil. Trans.* 52. *tab.* 1. *f.* 2.

Stem ſmooth, ſoft, inclining to carnation, with white warts changing towards the border of the cup into purple and at last dark brown: *cirri* in ſeveral rows, pellucid, unequal, of various colours; *disk* stellate, compoſed of variegated rays of brown yellow grey and white.

57. A. *gemmacea*. Pale red, longitudinally striate, with numerous miliary glands down the striæ: disk surrounded with short petal-like projections which are invested with cirri.

Cornish coast. *Phil. Trans.* 52. *tab.* 1. *f.* 4.

Body cylindrical, pale red near the baſe, the rest yellow mixed with grey: *glands* of the middle row white, the others the colour of the stem: *tentacula* retractile, whitish, varied at the upper-part with ſeveral brown tranſverſe lines and brown ſpots

58. A. *Mesembryanthemum*. Dull crimson, short, thick smooth, with retractile cirri; the edge of the disk surrounded with a single row of tubercles.

Rocky shores. *Phil. Trans.* 52. *tab* 1. *f.* 5.

Body when cloſed reſembling a button: *cirri* red, blue, white, or variegated; *tubercles* shining, varying in colour.

59. A. *Dianthus*. Smooth, nearly cylindrical; the disk 5-lobed and foliaceous, with small white cirri: mouth elevated and striate.

Rocky coasts. *Phil. Trans.* 57. *tab.* 19. *t.* 8.

Body ſeated on a short thick stalk, pendulous, and when cloſed reſembling a ſmall whitish fig.

14. ASCIDIA.

60. A. *rustica*. Oblong, brownish with fleſh-colour apertures, rough at the extremities, ſmooth in the middle.
The ocean. *Br. Zoöl.* iv. *t.* 23. *f.* 35. *Barbut t.* 5. *f.* 4.
Body nearly cylindrical, flat underneath, turned up at one end, about 2 inches long.

61. A. *mamillaris*. Somewhat parallelipiped, whitiſh: apertures terminal, of the ſame colour as the body.
Cornish coaſt. *Pall. Spicil. Zöol.* 10. *p.* 24. *t.* 1. *f.* 15.
Body very irritable, variouſly ſhaped, wrinkled and gibbous, here and there ſprinkled with ſoft briſtles, dirty white, coriaceous: nipple of the apertures hemiſphærical, rich ſcarlet within.

15. DERRIS.

62. D. *sanguinea*.
Pembrokeshire coaſt. *Linn. Trans.* 3. *t.* 13. *f.* 1. 2.
Body cylindrical, moſtly tapering to a point behind, jointed and capable of great flexibility, covered with a membranaceous tranſparent coat through which the internal parts are viſible: *head* extended beyond the outer ſkin, leſs than the anterior part of the body, to which it is connected by a membranaceous covering forming a neck: *feelers* white, ſeated on the top of the head, capable of being raiſed or depreſsed at pleaſure: *mouth* with 2 lips, the upper one hooked and moveable, the lower ſtraight and fixed.

16. HOLOTHURIA.

63. H. *Pentactes*. Body with 5 longitudinal rows of tubercles, and 10 ramified tentacula.
The ocean. *Br. Zoöl.* iv. *t.* 26. *f.* 41. *Barbut t.* 6. *f.* 6.
Body about 6 inches long, cylindrical, a little incurved, greeniſh brown: *tubercles* hollow, in pairs, with a ſmall retractile filament from each: *tentacula* elegantly ramified, yellow and ſilver, reddiſh at their tips.

17. TEREBELLA.

64. T. *conchilega*. whitiſh, with numerous filiform cirri round the mouth; the upper-ones very long: branchiæ rich red.
Pall. Miſcell. Zöol. t. 9. *f.* 17. *Br. Zoöl.* iv. *n.* 24.
Within the ſabella conchilega; about 5 inches long.
Body flat, tapering towards the tail, pellucid, above reddiſh: *head* armed with 4 ſcales beneath: *tube* or caſe taper, ſtraight, compoſed of minute particles of agglutinated ſand, about the ſize of a gooſe-quill, and nearly half a foot long.

18. LIMAX. *Snail, Slug.*

65. L. *ater*. Body black, furrowed and wrinkled.
Woods, Gardens, &c. *Barbut t.* 3. *f.* 1.
Body about 3 inches long, narrower at each end, convex on the back, paler and flat beneath: *shield* rough with numerous dots.

66. L. *rufus*. Above dull reddiſh, beneath whitiſh.
Damp ſhades. *Barbut. tab.* 3. *f.* 2.
Body hardly 2 inches long, ſlightly furrowed, withot ſpots or belt: larger *feelers* black above

67. L. *flavus*. Amber-colour, with whitiſh ſpots.
In herbage *Barbut. tab.* 3. *f.* 4.
Body an inch and a half long, prominent on the back, hollowed underneath, ſlightly wrinkled.

68. L. *maximus.* Cinereous, with or without spots.
Damp places. *Barbut t.* 3. *f.* 3.

Body 4 or 5 inches long, reticulate on the head with black, ſometimes with 3 longitudinal pale lines down theback, and 4 dusky ones ſpotted with black.

69. L. *agrestis.* Whitish, with blackish feelers.
2. Whitish with a yellowish shield.
Gardens and groves. *Linn. Trans.* iv. *p.* 85. *t.* 8. *f.* 1-4.

Body 2-9 lines long, varying a little in colour.

70. L. *lanceolatus.* Linear-lanceolate, very sharp at each end, surrounded with a membranaceous border: feelers none.
Pall. Spicil. Zool. 13. *p.* 19. *tab.* 1. *f.* 11.

On the Cornish coast, of a very uncertain Genus.

Body 2-lobed and grooved on the margin beneath, marked on the sides with obſolete ſtriæ oblique on the forepart, and recurved in an angle near the back.

19. APLYSIA.

71. A. *depilans.* Of an uniform leaden or purple colour.
The ocean. *Sow. Misc. t.* 53. *Br. Zool. t.* 21. *f.* 21. *Barb. t.* 3. *f.* 5. 6.

Body 2 or 3 inches long, apparently a miſ-shapen maſs enveloped in a looſe skin which folds over and nearlymeets on the back, tapering towards each end: *shield* pale, nearly in the middle of the back, oval: *eyes* placed behind the longer and hindmost pair of feelers.

72. A. *viridis.* Green, beneath pale: below the head a dilated wing-like membrane each side.
Montague Linn. Trans. 7. *p.* 76. *tab.* 7. *f.* 1.

Body formed in front like a common Limax, graſs green, with a few ſmall azure ſpots on the upper part of the fins, and more numerous-ones beneath, depressed, with 2 membranous fins gradually decreasing in size: *front* bifid: *lips* with a black margin; *feelers* 2, flat, behind each of which is a whitish mark in which is placed a ſmall black eye: *shield* not visible.

20. DORIS. *Sea lemon.*

73. D. *Argo.* Pale red, oval, smooth, with 2 small feelers at the mouth: vent surrounded by a ramified fringe.
Sea coasts. *Br. Zool. t.* 22. *f.* 22. *Barbut t.* 4. *f.* 4.

Body 3 or 4 inches long, rounded at each end, convex in the middle, marked with ſulphur ſpots and black dots: *vent* ſurrounded by an elegantly ramified ſulphur fringe dotted with black: *feelers* 4, white dotted with red at the tips.

74. D. *vermigera.* Oblong-oval; reddish-grey, covered on the back with numerous vermicular appendages.
Taken on the Mumble rocks, by the Author, April 24, 1807.

Body an inch and half long, oblong-oval, white and flat underneath; reddish-grey and hemisphærical on the back, clothed with roundish taper ſoft flexile appendages about 3 lines long, variegated grey and purplish-brown: *feelers* 4, 2 taper white-ones below the mouth, and 2 short conic brown ones on the top of the head. Reſembles D. clavigera of Muller Zool. Dan. but the pedicels are not clavate, and they are longer and more flexible; and it has 4 feelers.

75. D. *verrucosa.* Body covered with tubercles on the upper-side.
Sea coasts. *Br. Zool. t.* 21. *f.* 23. *Barbut t.* 4. *f.* 1.

Body oblong, nearly cylindrical, convex and rounded at the extremities, with the lateral margins deflected : *feelers* 2, besides 8 short ones ſurrounding the mouth : *pedal-limb* oval, oblong, with a flat margin.

76. D. *bilamellata*. Oval, covered with a rough punctured plate.

Sea coasts, *Brit. Zool. t.* 24, *f.* 24. *Barbut t.* 4. *f.* 2.

Body the size of a ſnail, abrubt in front, glabrous, above pale brown with grey dots, beneath white : *plate* with ſulphur dots above, white beneath : *feelers* brown : *vent* tranſverſe, ſurrounded with 6 ſulphur plumes.

77. D. *pinnatifida*. Body elongated, pinnate down the sides with conic clusters of ovate imbricate papillae.

Montague Linn. Trans. 7. *p.* 78. *t.* 7. *f.* 2. 3.

Body 3 lines long, green and rufous : *front* rounded : *tentacula* 2, trumpet-shaped, ending in a retractile filiform appendage : *clusters* opposite, consisting of 5 or 6 rows of imbricate ovate blue-grey papillæ tipt with black.

78. D. *cærulea*. Body elongated, covered with clavate simple vesicles placed in whorls.

Montague Linn. Trans. 7. *p.* 78. *t.* 7. *f.* 4. 5.

Body a quarter of an inch long, green : *feelers* 4, ſomewhat filiform : *eyes* at the baſe of the hinder feelers : *tubercles* blue, tipt with orange, with 2 pink oval veſcicles on the back between the ſecond and third whorl.

79. D. *flava*. Body elongated, tapering to a point behind : vent on the back, surrounded by 7 feathered appendages, below which are 2 long simple fusiform ones.

Montague Linn. Trans. 7. *p.* 79. *t.* 7. *f.* 6.

Body half an inch long, white with orange spots : *feelers* 4, long, pointed, orange, with 2 erect wrinkled ones on the top of the head : *vent* nearer the lower end.

80. D. *maculata*. Body slender, tapering, with several pairs of subclavate peduncles down the back lobed at their tips.

Montague Linn. Trans. 7. *p.* 80. *t.* 7. *f.* 8-9.

Body 8 lines long, pale yellow ſpeckled with pink : *front* obtuſe : *feelers* 2, trumpet-shaped, with a filiform appendage from the centre of each : *peduncles* mostly 4 pair, with a single one behind, 5 or 6-cleft at top.

81. D. *marginata*. Body oval, surrounded with a thin membranaceous undulate margin : front obtuse, crenate.

Montague Linn. Trans. 7. *p.* 79. *t.* 7. *f.* 7.

Body a quarter of an inch long and nearly as much broad, white tinged with pink in the middle : *feelers* 2, wrinkled or slightly feathered : *vent* furnished with feathered membranes.

21. NEREIS.

82. N. *noctiluca*. Blue-green, invisible to the naked eye, with 23 segments.

The Ocean. *Amæn. Acad.* 3. *t.* 3. *Barbut tab.* 4. *f.* 8.

Body phoſphoreſcent, illuminating the ſea by night, very minute and agile, shining with a blue-green splendor.

83. N. *pectinata*. Smooth, prismatically coloured, with 14 rich gold tentacula and legs each side.

In the Sabella tubiformis. *Sowerby Brit. Miſcel. t.* 51.

Body about an inch long, with numerous brown papillæ about the lip : *tentacula* ſimple : *legs* compoſed of tufts of hairs.

84. N. *pelagica.* Tawny, with a ſcarlet line down the back, convex above, with cirrate and warty peduncles.

The Ocean. *Br. Zool.* iv. *t.* 25. *f.* 33. N. rufa.

Body 4 or 5 inches long, compoſed of numerous articulations : *jaws* blackiſh-brown : *head* with a triangular white ſpot between the eyes, and 2 others at the ſides : *briſtles* ferruginous : *cirri* of the front ſides and tail whitiſh : *tail* ending in 2 cirri.

85. N. *cærulea.* Glabrous, depreſſed, blueiſh-green, ſemitranſparent.

The Ocean. *Br. Zool.* iv. *t.* 25. *f.* 32. *Barbut t.* 4. *f.* 11.

Body ſhining, about 4 inches long, with a groove along the belly: *ſegments* about 184.

86. N. *viridis.* Green, depreſſed : peduncles with lanceolate lamellæ or ſcales.

The Ocean. *Mull. Wurm. t.* 11. *f.* 1-6. *Linn. Trans.* v. *p.* 8.

Body 2 or 3 inches long, filiform, graſs-green, with about 130 equal ſegments : *head* with 3 feelers each ſide : *eyes* 2, black : *proboſcis* clavate, which it protrudes when touched : *tail* with 2 ſhort cirri. The young are reddiſh, with ſnowy head, feelers, cirri, and ſcales.

87. N. *lamelligera.* Ochraceous, round tapering to both ends: proboſcis ſtellate with 4 fleſhy points: peduncles compreſſed, furniſhed with a ſemilunar ſcale above, and a larger ſemicordate-one beneath.

The Ocean. *Sow. Brit. Miſc. t.* 30. *Shaw Miſc. t.* 311.

Body nearly a foot long, ochre with a dark line down the middle of the belly, conſiſting of 200-550 ſegments : *head* with 4 feelers : *eyes* 2, black : *tail* bifid.

88. N. *iricolor.* Orange-green, priſmatically coloured, orange-red at the lower extremity : feelers and eyes none.

Montague Linn. Tranſact. 7. *p.* 82.

Body about 3 feet long, nearly round, purpliſh-red near the anterior end : *upper-lip* ſomewhat protruded, whitiſh, with 4 tranſverſe black dots at the baſe : *tail* ſuddenly tapering to an obtuſe point: *ſegments* about 390, with as many tubercles and tufts each ſide.

89. N. *Margarita.* Changeable and greeniſh-brown, with a purple ſtreak down the back : head 3-loded.

Montague Linn. Trans. 7. *p.* 82.

Body 5 or 6 inches long, convex above, a little tapering, with about 74 ſegments and tufts : *head* 3-lobed, the 2 outer ones larger with a tubercle at their ends and 2 feelers at their baſe, the middle-one ending in 2 feelers : *mouth* beneath, protruſile, with a circle of numerous black ſpecks : *tail* ending in 2 filaments.

90. N. *lineata.* Depreſſed, yellow, with numerous purple ſpots diſpoſed in 6 lines.

Montague Linn. Trans. 7. *p.* 83.

Body an inch and a half long, with about 120 ſegments : *feelers* 6: *tail* ending in 2 ſhort appendages.

91. N. *octentaculata.* Depreſſed, red, with a purple line along the back and a yellow ſpot at each ſegment.

Montague Linn. Trans. 7. *p.* 84.

Body 3 inches long, with between 80 and 90 ſegments and tufts: *feelers* 6, short, red, ſetaceous: *eyes* 4, one pair over the other.

22. APHRODITA. *Sea Mouse.*

92. A. *aculeata.* Oval, brown, beneath fleſh-colour; with long silky changeable gold-green hair each side the body.

The Ocean. *Br. Zool.* iv. *t.* 23. *f.* 25. *Barbut t.* 4. *f.* 5.

Body 4 or 5 inches long, convex above and clothed with short brown fir, beneath covered with a naked skin a little prominent in the middle: *vent* covered with 2 ſcales: *mouth* placed beneath: *feet* 30-36 each side, each compoſed of a tuft of 5 or 6 strong black spines intermixed with long gold-green hairs.

93. A. *annulata.* Pale yellow, oblong, tapering to both ends, smooth, annulate, with a minute spine on each ring running down the back.

Pennant Brit. Zool. iv. *p.* 45. *n.* 28. *t.* 24. *f.* 28.

Body 2 inches and a quarter long: *feet* ſmall.

94. A. *scabra.* Oblong, with 2 rows of alternate scales down the back: mouth projecting, cylindrical.

Br. Zool. iv. *t.* 4. *f.* 27. *Barbut t.* 4. *f.* 7.

Body about an inch long, with 20 alternate ſcales and about as many feet each side.

95. A. *squamata.* Oblong, with 2 rows of large opposite rough ochraceous scales dotted with black.

Brit. Zool. iv. *t.* 23. *f.* 26. *Barbut t.* 4. *f.* 6.

Body about an inch long, reſembling an Oniscus, clothed each side with 24 ſcales and furniſhed with as many feet: *belly* and middle of the *back* naked: *feelers* cloven: *mouth* concealed in an aperture: *tail* ending in a few short bristles.

96. A. *lepidota.* Oblong, with a red stripe down the back, and clothed with minute imbricate scales.

Br. Zool. t. 24. *f.* 29. *Baster subs. t.* 4. *f.* 3. A-C.

Body not an inch long, tapering towards the tail, with about 14 pair of very finely dotted ſcales, and 16 feet each side: *feelers* undivided.

23. AMPHITRITE.

97. A. *volutacornis.* Feelers yellow-brown with chesnut spots, convolute, with doubly ciliate fibres: proboscis none.

Montague Linn. Trans. 7. *p.* 81. *tab.* 7. *f.* 10.

Body about 5 inches long, with a dark purple indented membrane behind the head edged with white: *feelers* with numerous fibres on 2 ſpiral stems: *ſcutel* of 10 joints, yellow with purple sides: *body* dark purple, of about 80 ſegments, tongue-shaped at the end, with 4 rows of plates above and a slight groove down the middle.

98. A. *Ventilabrum.* Feelers pale with purple spots, their fibres ciliate on the inner margin; one with 54 fibres, the other with 36: proboscis none.

Sowerby Miſcell. t. 12. *Shaw Miſcell. t.* 324.

Body pale red, with about 150 yellow peduncles each side, incloſed in a clay-coloured tube compoſed of 2 coats which are cartilaginous, the outer-coat darker and rougher.

99. A. *rosea.* Feelers white with crimson spots: body brown, with shining golden tufted peduncles: proboscis none.

Sowerby Brit. Miſcell. tab. 67.

Body hardly 2 inches long, incloſed in a brown caſe, yellowish towards the head : *feelers* of about 12 fibres each.

100. A. *campanulata.* Feelers pale with black spots: body striped red and yellow, with white peduncles : proboscis bell-shaped at the end.

In the Serpula triquetra. *Sowerby Miscell. t.* 31.

Body about an inch long, yellow with red stripes, furnished with about 6 feet each side : *feelers* with each 10 or 11 fibres : *proboscis* white, ending in a bell-shaped tube which projects a bifid tongue.

24. SPIO.

101. Sp. *seticornis.* With thin capillary striate feelers.

The Ocean. *Baster op. subsc.* 2. *p.* 134. *tab.* 12. *f.* 2.

Body about 3 inches long, whitish with a tinge of green, with a red line down the middle of the back, blackish-grey on the fore-part with transverse white striæ, sea-green behind : *head* pale.

25. NAIS.

102. N. *serpentina.* Body serpentine, with red spiral intestines and triple black collar.

Stagnant Waters. *Shaw Miscell. t.* 270.

Body about 9 lines long : *peduncles* warty, with 3 hooked bristles.

103. N. *proboscidea.* With single lateral bristles, and very long proboscis.

Stagnant Waters. *Shaw Miscell. t.* 379.

Body 3 lines long, hyaline, with a blackish flexuous intestine; each ſegment with a single longish bristle each side ; *head* forked, armed with a mouth and tongue ; *vent* terminal.

104. N. *digitata.* With single lateral bristles : tail armed with 6 unequal retractile processes.

Stagnant Waters. *Shaw Miſcell. t.* 452.

Body 4 lines long, with a reddish vein down the middle, furnished beneath with a double row of minute ciliate protuberances : *eyes* 0 : *tail* rounded.

26. LERNÆA.

105. L. *Cyprinacea.* Body obclavate: thorax cylindrical forked : tentacula lunate at top.

On the Carp and Roach. *Barbut t.* 7. *f.* 3.

Body about half an inch long, hardly larger than a straw, pale and ſomewhat pellucid, thruſt out of a kind of sheath, with 3 obtuſe tubercles towards the other extremity : *mouth* with 2 ſoft fleshy proceſses near it, and on each side another ſoft lunate proceſs.

106. L. *Salmonea.* Body obovate : thorax inversely heart-shaped : arms approximate, linear.

On the Salmon. *Barbut t.* 7. *f.* 4.

Body 6 lines long, ſoft, pale : *head* ſmall, oblong, rather convex, with horizontal lips, the upper-lip armed with 2 rigid moveable hooks, the lower shorter and cloven : *abdomen* obovate, broader than the last : *ovaries* whiter, cylindrical, granulate within, as large as the whole animal.

107. L. *Spratti.* Body oblong, red : head with 2 barbs : neck notched : ovaries linear, green.

On the Sprat, *Sowerby Brit. Miscell. tab.* 68.

Body about 2 inches long, shaped like an oat, obliquely truncate behind ; *neck* long, barbed ; *mouth* rather large, under the head.

108. L. *Encrasicoli*. Body cylindrical, horn-colour; head with 2 barbs: ovaries filiform, white.

Found attached to the bodies of the Clupea Encrasicolus and Sprattus, frequently in Swansea bay.

Body differing from the last in not tapering to the extremities, in being of a brown-horn-colour, and in having the oviducts very long, filiform, and clear white.

27. SEPIA. *Cuttle-fish.*

109. S. *octopus*. Body without tail or appendage: pedunculated tentacula or longer arms none: arms beset with a double row of suckers.

Br. Zool. iv. *t.* 44. *Sow. Miſcell. t.* 48. *Barbut t.* 8. *f.* 1.

Body growing to a great size, short, inflated at the baſe: *arms* as long as the body, tapering to a point, clothed with 2 rows of alternate ſuckers on the inside: *ſuckers* shaped like the cup of an acorn, furnished with numerous hooks.

110. S. *officinalis*. Body without tail, with a crenate margin each side: peduncled tentacula 2: arms beset with 4 rows of suckers.

Brit. Zool. iv. *p.* 55. *Barbut t.* 8. *f.* 2.

Body ovate; the margin interrupted at the bottom: *tentacula* or longer arms 4 times as long as the others, their tips ſpatulate and furnished within with numerous ſuckers: *arms* shorter than the body, ovate, pointed.

111. S. *media*. Body cylindrical tapering to a point: tail pointed, finned and carinate each side: peduncled tentacula 2.

Br. Zool. iv. *t.* 29. *f.* 45. *Barbut t.* 8. *f.* 3.

Body ending in a point, furnished with a winged membrane each side commencing below the middle of the body, greenish or brown: *eyes* blue.

112. S. *Loligo*. Body cylindrical, furnished with a flattish rhombic sharp-edged membrane at the tail: peduncled tentacula 2.

Brit. Zool. iv. *t.* 27. *Barbut t.* 8. *f.* 4.

Body reddish-brown, differing from the laſt in not gradually tapering to a point: *eyes* blue: *dorſal-bone* lanceolate, tranſparent, shaped like a pen.

113. S. *Sepiola*. Body rounded at the base, with a rounded wing-like process at the base each side: peduncled tentacula 2.

Brit. Zool. t. 29. *f.* 46. *Barbut t.* 8. *f.* 5.

Body not longer than the head and neck: *tentacula* as long as the body; *wings* nearly circular.

28. TRITON.

114. Tr. *littoreus*.

Barbut. t. 7. *f.* 2. *Philos. Trans.* 50. *t.* 34. *f. A.*

Body oval, dilated and lobed at the lower end: *head* oblong, rounded, not compreſsed, terminated by a tough membrane connecting all the arms at their baſe: *mouth* placed at the baſe of the tentacula: *proboſcis* long, tapering to a point, annulate, cartilaginous: *arms* 6 pair, the 3 lower-pair furnished with a moveable thumb, all jointed, involute and ciliate on the inner-margin.

29. MEDUSA.

115. M. *fusca.* Body with 16 brown rays, and a brown circle in the middle; the circumference edged with alternate oval tubercles and crooked fangs.

Borl. Cornw. p. 256. *t.* 25, *f.* 7. 8. *Br. Zool. n.* 48.

Rays pointing from the circumference to the centre: *tentacula* 4, jagged, a little longer than the body.

116. M. *purpurea.* Body with pale purple rays, and a light purple cross in the middle, between each bar of which is a deep purple horse-shoe-shaped mark.

Borl. Cornw. p. 257. *t.* 25. *f.* 9. 10. *Br. Zool.* 4. 49.

Rays diverging from the circumference: *tentacula* 4, short, thick, not longer than the body.

117. M. *tuberculata.* With 15 brown rays meeting at the centre, and small oval tubercles round the margin.

Borl. Cornw. t. 25. *f.* 11. 12. *Barbut t.* 9. *f.* 8.

Tentacula 4, plain, much longer than the body.

118. M. *undulata.* Margin undulate, with fangs on the projecting parts; beneath 4 orifices, between which is a stem divided into 8 ragged tentacula.

Borl. Cornw. t. 25. *f.* 15. *Barbut. t.* 9. *f.* 9.

119. M. *lunulata,* Margin tubercled; beneath 4 conic appendages forming a cross, with several leaf-like serrate-ones surrounding it.

Borl. Cornw. t. 25. *f.* 16. 17. *Br. Zool.* iv. *n.* 52.

Tentacula 8, not exceeding the edges of the body, between each of which is a semilunar aperture.

120. M. *simplex.* With a plain circumference and 4 apertures beneath: tentacula none.

Borl. Cornw. t. 25. *f.* 13. 14. *Br. Zool.* iv. *n.* 53.

121. M. *cruciata.* Margin fringed with fine fibres; the disk marked with a white cross, each arm of which has a blackish spot.

The Sussex coast. *Barbut Worms, t.* 9. *f.* 1.

Body like a tranſparent colourleſs jelly, ſurrounded at the edge with a fringe of fibres.

122. M. *capillata.* Margin with 16 indentures; beneath with 16 rays meeting at the centre, where they are surrounded by numerous fibres.

Kentish coast. *Barbut Worms t.* 9. *f.* 3.

Body whitish, ſemipellucid, convex, fragile, flat beneath with a rough circle; the margin divided into 8 portions, each of which is emarginate.

30. ASTERIAS. *Star-fish.*

A. *With 5 stellate rays.*

123. A. *rubens.* Pale orange, with lanceolate convex rays every where clothed with small spines.

Br. Zool. t. 30. *f.* 58. *Baster ſubs. t.* 12. *f.* 1-6.

Body 14 inches in diameter, varying in colour, but generally lemon-colour marbled with dark brown, beneath whitish: ſpines white.

124. A. *spinosa.* Rays lanceolate, of nearly equal thickness, beset with numerous spines or tubercles.

Reſembles the last, but the rays are not convex.

Borl. Cornw. t. 25. *f.* 18. *Br. Zool.* iv. *n.* 60.

125. A. *membranacea*. Rays broad, membranaceous, very thin: beneath with 5 convex ribs.

Br. Zool. iv *t.* 31. *f.* 59. *Linck. stell. mar. t.* 1. *f.* 2.

Body flat, with a broad membrane between the rays.

126. A. *gibbosa*. Brown, very convex, covered with a rough skin, with short broad rays slightly projecting.

Borl. Cornw. t. 25. *f.* 25. 26. *Linck. t.* 3. *n.* 20.

127. A. *clathrata*. Rays short, thick, cancelled above, hirsute underneath.

Linck. t. 14. *n.* 23. *t.* 7. *n.* 9. *Br. Zool.* iv. *n.* 55.

128 A. *oculata*. Purple, with smooth dotted or punctured rays divided nearly to the base.

Br. Zool. t. 30. *f.* 56. *Linck. t.* 36. *n.* 62.

129. A. *equestris*. Disk tubercled: margin with oval plates, with 3-6 tubercles on each: tentacula rather clavate.

Sowerby. Miscell. t. 63. *Linck.* t. 12. *n.* 21. *t.* 26. *n.* 42.

Body red: *rays* a little projecting: *plates* on the margin ſurrounded with ſmall stud-like protuberances: *feelers* flattish, rather clavate.

130. A. *glacialis*. Disk with tubercles disposed in a circle: rays angular, the angles with prickly protuberances.

Linck. t. 38. 39. *n.* 69. *Br. Zool.* iv. *n.* 54.

Body when alive rufous undulate with white, ſometimes grey, brown, or green: *rays* thick, lanceolate, with 5 or 7 prickly angles: *tentacula* numerous, pellucid, with a row of ſmall pinnules each side.

B. *With* 5 *radiate or filiform rays.*

131. A. *Caput Medusæ*. With divided and repeatedly subdivided rays: disk and rays granular: mouth depressed.

Barbut t. 10. *f.* 12. *Shaw Miſcell. t.* 103.

Body pale red: *rays* divided, each of the divisions branching into 2 others, which mode of ſubdivision is continued to a vast extent, gradually decreasing in size, till at length the ramifications amount to many thouſands, forming a beautiful net-work.

132. A. *Ophiura*. Disk scaly: rays quadrangular, with a single row of scales down each.

Br. Zool. iv, *t.* 32. *f.* 62. *Barbut. t.* 10. *f.* 9.

Body ſmall, glabrous, white, grey, or reddish, orbicular, entire: *rays* like a ſerpents' tail, 4 times as long as the body, clothed with a row of divergent ſolid ſcales.

133. A. *minuta*. Body round, entire, with long slender hirsute rays.

Tenby Coast. *Brit. Zool.* iv. *n.* 61.

134. A. *brachiata*. Body nearly circular, covered above with oval scales in 10 alternate broad and narrower rays: rays jointed, spinous down the sides.

Montague Linn. Trans. 7. *p.* 84.

Body hardly half an inch in diameter, the rays 7 or 8 inches long, purplish-brown, rough between the arms with minute warts: *rays* furnished at the sides with ſmall moveable ſpines at each joint, 8 or 9 in a row.

135. A. *sphærulata.* Body 5-lobed, glabrous above the aperture; beneath 5-pointed, with a small globular head between each ray: rays jointed, hirsute down their sides.

Anglesea. *Brit. Zool.* iv. *tab.* 32. *fig.* 63.

136. A. *varia.* Body circular, entire, with 10 alternate broader and narrower radiate stripes; the narrow-ones with lozenge-shaped extremities: rays hirsute, annulate with red.

Borl. Cornw. t. 25. *f.* 21. *Br. Zool* iv. *n.* 65.

137. A. *aculeata.* Body circular, entire, with 10 alternate broader and narrower radiate stripes, all of them simple at the ends, rays hirsute.

Borl. Cornw. t. 25. *f.* 19. *Br. Zool.* iv. *n.* 66.

138. A. *fissa.* Body circular, with 5 deep notches, and 5 pale radiate stripes: rays hirsute.

Borl. Cornw. t. 25. *f.* 20. *Br. Zool.* iv. *n.* 68.

139. A. *hastata.* Body somewhat pentangular, indented, brownish-red with 10 alternate broader and narrower ochraceous stripes, all broader at their extremities: rays jointed, hirsute.

Borl. Cornw. t. 25 *f.* 22. *Br. Zool.* iv. *n.* 67.

140. A. *nigra.* Body pentangular, black, with 5 white radiate stripes; rays hirsute, olive, tessellate with deeper shades.

Borl. Cornw. t. 25, *f.* 23. *Br. Zool.* iv. *n.* 69.

141. A. *pentaphylla.* Body in 5 ovate lobes; rays hirsute down the sides, tessellate above and below with green or blue.

Borl. Cornw. t. 25. *f.* 24. *Br. Zool.* iv. *n.* 64.

C. *With more than 5 rays.*

142. A. *papposa.* Body with 12-14 lanceolate rays, surrounded at the edges with short fascicular processes: body muricate.

Barbut. t. 10. *f.* 2. *Shaw. Miscell t.* 418.

Body above ferruginous ſpotted with white, the rays paler at the ends: *rays* shorter than the body, with black grooves underneath.

143. A. *pectinata.* With 10 pinnate filiform rays, and as many short simple ones underneath.

Br. Zool. iv. *t.* 33. *Barbut. t.* 10. *f.* 11.

Body ſmall, red, covered above with 5 unequal valves: *apertures* 2, one at the confluence of the valves, the other in the largest valve: *longer-rays* with numerous short ramifications, furnished beneath with hollow tubes, from which issue ſmall tranſparent filiform flexible bodies; shorter-rays ending in an incurved claw.

31. ECHINUS. *Sea-egg. Sea Urchin.*

Obs. Such of this genus as have been hitherto found in a fossile state only, will be deſcribed under the genus Helmintholithus, among the petrifactions.

A. *Vent vertical.*

144. Ech. *esculentus.* Nearly globular, with 10 porous su-

tures; the pieces covered with small tubercles supporting the spines.

Br. Zool. t. 34. *Barbut. t.* 11. *f.* 1. *Shaw. Misc. t.* 223.

Shell reddish or yellowish: *ſpines* short, violet, losing their colour and falling off when dead: *pores* in about 3 rows: *tubercles* pale, ſurrounded with a circle of leſser-ones: *vent* cloſed by a coriaceous membrane covered with ſpines.

2. Leſs, depreſsed at top, with narrower ſutures.

Baster. op. subs. 3. *p.* 112. *t.* 11. *f.* 2-8.

Shell with fewer tubercles, and a ſerrate line down the middle of the pieces: *pores* of the ſutures in alternate rows of 2 or 3 foramina.

145. Ech. *Cidaris.* Hemisphærical, depressed, with 5 flexuous linear sutures; the pieces alternately bifarious.

Scotland. *Sowerby Brit. Miscell. t.* 44.

Shell a compressed globe: the *pieces* granulate, with 2 rows of alternate protuberances furnished with perforated papillæ, ſurrounded with a circle or two of granulations, and ſeparated by a groove running round them: *ſpines* elongated, granular, in 2 rows, with 2 rows of ſmaller-ones at their baſe: *mouth* covered with imbricate obtuſe ſpines.

B. *Vent underneath.*

146. Ech. *lacunosus.* Ovate, heart-shaped, gibbous, with 5 depressed ovate porous sutures placed in a stellate manner.

Br. Zool. iv. *t.* 35. *Barbut. t.* 11. *f.* 8.

Shell purple at top; the ſpaces between the ſutures tubercled in waved rows; beneath studded and divided by 2 ſmooth ſpaces: *ſpines* very long, mixed with shorter-ones.

147. Ech. *Spatagus.* Ovate, a little heart-shaped, gibbous, with 4 depressed porous grooved sutures placed in a stellate manner.

Br. Zool. iv. *t.* 34. *f.* 75. *Barbut. t.* 11. *f.* 7.

Shell extremely brittle, gibbous at one end, and marked by a deep groove instead of the fifth ſuture at the other, tubercled beneath: *pores* in a double row along each side of the grooves: *ſpines* slender, bristle-like.

ORDER III. TESTACEA. *SHELLS.*

A. *With more than two valves.*

32. CHITON.

148. Ch. *marginatus.* With 8 smooth valves, reflected and serrate on the margin, carinate down the back.

Br. Zool. t. 36. *f.* 2. *Barbut. t.* 1. *f.* 4.

Shell 6 lines long and 4 broad, grey or brown, ſometimes mottled, oblong-oval, rough on the ſurface: *valves* imbricate over each other in a point.

149. Ch. *lævis.* With 8 smooth valves, even on the margin, carinate and beaked on the back.

Brit. Zool. t. 36. *f.* 3.

Shell oblong, half an inch long and a quarter broad, deep rufous-brown, ſometimes mottled with yellowish-white, with mostly a pale line down the back, ſometimes finely striate tranſverſely; the margin broad and finely reticulate: *valves* beaked in the centre.

150. Ch. *cinereus.* With 8 valves, nearly smooth, oval, carinate, beaked on the back, slightly ciliate on the margin.

Chemn. Conch. 8. *tab.* 96. *f.* 818. *Mont. Shells, p.* 3.

Shell a quarter of an inch long, cinereous, reddish when alive, compreſsed, a little reflected on the hinder angle at the baſe, with a rather broad margin.

151. Ch. *albus.* With 8 valves, smooth, oval, not carinate; the first valve notched on the hind-part.

Barbut. t. 1. *f.* 1. *Chemn. Conch.* 8. *t.* 96. *f.* 817.

Shell less than the laſt, pure white.

152. Ch. *fascicularis.* With 8 valves, nearly smooth, slightly carinate, surrounded at the margin with tufts of hairs.

Chemn. Conch. 10. *t.* 173. *f.* 1688. *Montag. Shells. p.* 5.

Shell cinereous, slightly carinate.

153. Ch. *crinitus.* With 7 valves, thickly clothed with short hairs.

About 6 lines long. *Br. Zool.* iv. *t.* 36. *f.* 1.

It is probable that theſe hairs are a ſpecies of marine Conferva.

154. Ch. *discors.* With 7 valves, carinate, strongly beaked; the 5 middle-valves divided transversely from the anterior base to the beak.

Salcomb Bay. *Montague Brit. Shells. p.* 3. *n.* 3.

Shell half an inch long, oblong: *valves* ſmooth or faintly striate on the upper-part, very fine shagreen on the lower, the end-ones rufous-brown, the rest dark cinereous: *beaks* frequently rufous: *margin* moderately broad, faintly reticulate.

33. BALANUS. *Acorn-shell.*

155. B. *communis.* Conic, ribbed: lid of 4 valves, striate transversely, with a longitudinal groove on the 2 longest.

Br. Zool. t. 37. *f.* 4. *Donovan. t.* 30. *f.* 1.

Shell ſometimes an inch in diameter, and nearly 3 quarters high, grey-brown, rugged, compoſed of about 6 valves: *lid* pointed.

156. B. *balanoides.* Somewhat conic, smooth, ribbed: lid of 4 valves; the 2 upper slightly striate transversely, the other smooth.

Br. Zool. t. 37. *f.* 5. *Donovan. t.* 36. *f.* 2. 3. *Da Cost. t.* 17. *f.* 7.

Shell half the size of the former, ſometimes much depressed and dilated at the baſe, white, ſmooth, often deeply grooved at the baſe, of 6 valves divided by a deep furrow: *lid* more obtuſe.

157. B. *punctatus.* Slightly conic, rugged, ribbed: lid 4-valved, the upper longitudinally striate, the edges of the upper and lower closely united at top, indented, and locking into each other.

Devonshire. *Montague Brit. Shells. tab.* 1. *f.* 4.

Shell about a quarter of an inch broad, and not much higher, dull brown, very rugged, obtuſely ribbed: *lid* of 4 valves, the upper-one with a few longitudinal ridges, the rest punctured.

158. B. *rugosus.* Nearly cylindrical, grooved; lid of 4 rough angular erect valves, forming 4 distinct slightly reflected points.

Lepas borealis. *Donovan Brit. Shells, tab.* 160.

Shell about half an inch high, and leſs in diameter, generally divided into 6 compartments by furrows which become broad towards the top, where it ſpreads into angular points, wrinkled or ſtriate longitudinally, ſometimes ſmooth, white or purplish-red : *aperture* large, the lid tranſverſely ribbed.

159. B. *elongatus.* Elongated, clavate, with 3 wide and 3 narrow compartments, wrinkled longitudinally, faintly striate transversely.

Br. Zool. t. 37. *f.* 5. *a.* *Donovan. t.* 36. *f.* 3.

Shell 2 inches long, 4 lines broad at the baſe, white, cylindrical, cloven above the lid, with obtuſe compartments.

160. B. *Tintinnabulum.* Conic, obtuse, with 3 raised compartments contracting to a point upwards and longitudinally striate, and 3 depressed-ones contracting to a point downwards and transversely striate.

Donovan t. 148. *Barbut t.* 1. *f.* 6.

Shell nearly 2 inches long, leſs in diameter, purplish varied with white and red, augular : *lid* obtuſe, of nearly equal valves.

161. B. *costatus* Somewhat conic, with numerous equidistant ribs diverging from the aperture.

Donovan Brit. Shells. 1. *tab.* 30. *f.* 2.

Shell ſmall, whitish, with about 18 ribs.

162. B. *conoides.* Conic, smooth, finely reticulate, with pointed compartments : aperture very narrow.

Donovan Brit. Shells. 1. *tab.* 36. *f.* 3.

Shell about 4 lines wide, purplish ; *valves* divided at top, and pointed : *aperture* very ſmall.

163. B. *intertextus.* Slightly depressed, with interwoven obliquely striate valves ; the margin at the base irregularly serrate.

Br. Zool. iv. *t.* 38. *f.* 1. *Donovan t.* 36. *f.* 1. Lepas striatus.

Shell hardly a quarter of an inch wide, white, strongly and obliquely ribbed : *aperture* oblique, cloſed by the lid.

164. B. *Diadema.* Somewhat compressed, with 6 prominent longitudinally ribbed valves, alternating with as many depressed transversely striate ones.

Donovan Shells t. 56. *f.* 1. 2. *Da Costa t.* 17. *f.* 2. 2. 2.

Shell an inch high, and about 2 wide, roundish, dirty-white, with tranſverſe striæ on the sides of the valves : *aperture* funnel-form, 6-sided within : *baſe* concave, furnished with divisions or cells in a radiate manner.

34. LEPAS. *Bernacle.*

165. L. *anatifera.* With 5 valves, smooth ; the dorsal-valve rounded at the sides, and slightly carinate.

Br. Zool. iv. *t.* 38. *f.* 9. *Donov. t.* 7. *Da Cost. t.* 17. *f.* 3.

Shell an inch and a half long, bluish-white, compreſsed : *valves* yellow at the margins, obſcurely ſtriate ; the 2 larger-ones triangular, the 2 top-ones about half the size, the dorſal-one long, curved, narrow, rounded on the back, inclosing the others : *peduncle* long, wrinkled and darker towards the shell.

166. L. *anserifera.* With 5 valves, strongly striate in a radiate manner; dorsal-valve compressed at the sides, sharply carinate.

Donovan t. 166. *f.* 2. *Lister t.* 440. *f.* 283.

Shell about an inch long, reſembling the laſt, except in being ſtrongly striate and ſomewhat reticulate, the valves sharper and more pointed, the sides of the dorſal-one compressed and brought to a fine carinate edge down the middle.

167. L. *fascicularis*. With 5 valves, striate; dorsal valve much spread out and forming a sharp prominent angle at the base.

Ellis. Zooph. p. 197. *t.* 15. *f.* 6. *Donovan t.* 164.

Shell with the upper-valves pointed and turning back at the tip, a little convex in front; the dorſal-valve dilated at the baſe into an acute angle.

168. L. *sulcata*. With 5 valves, strongly ribbed; dorsal-valve, somewhat compressed, longitudinally striate, with a smooth slightly carinate edge.

Montague Brit. Shells. p. 17. *tab.* 1. *fig.* 6.

Shell about a quarter of an inch long, dirty white, nearly triangular: *lower-valves* with 15 strong ribs; upper-ones pointed at top, narrowing to a point downwards, with 7 or 8 ribs and ſmaller intermediate-ones: *peduncle* short, dusky.

169. L. *Scalpellum*. With 13 valves, roughish; dorsal-valve compressed, running into a sharp process about half way up.

Montague p. 18. *t.* 1. *f.* 4. *Donovan Shells. t.* 166. *f.* 1.

Shell 6 lines long, light brown, not striate, covered with short hairs, much compreſsed, obliquely truncate at top: *valves* reſembling ſcales, 6 each side; dorſal-one rounded at the edge at the baſe: *peduncle* very short, annulate, hairy.

35. PHOLAS.

170. Ph. *Dactylus*. Oblong, rough, with reticulate muricate striæ on the anterior end: hinge reflected forming several cells at the back.

Br. Zool. t. 39. *f.* 10. *Donovan Shells t.* 118.

Shell more than an inch long, above 3 broad, white, thin, brittle, a little reticulate, ending in a beak forming a large gape, with 4 accessory valves.

171. Ph. *parva*. Ovate, rough, reticulate, muricate at the anterior end: hinge reflected, without cells.

Br. Zool. t. 40. *f.* 13. *Montague Shells t.* 1. *f.* 7. 8.

Shell half an inch long, an inch broad, ending in a kind of beak at the larger end, with a single plate at the back but none below the hinge: *teeth* slender, curved, with a knob at the baſe.

172. Ph. *crispata*. Somewhat oval, reticulate on the anterior half and separated from the plain half by a broad furrow down the middle.

Br. Zool iv. *t.* 40. *f.* 12. *Donov. t.* 62. 69.

Shell nearly 2 inches long, 3 broad, gibbous, whitish, obtuſe, very open at both ends, striate tranſverſely: *hinge* reflected, ſmooth: *teeth* long, curved, without the knob at the baſe.

173. Ph. *candida*. Oblong, muricate on all parts with decussate striae: one valve with an additional tooth-like process.

Br. Zool. iv. *t.* 39. *f.* 11. *Donovan Shells t.* 132.

Shell near an inch long, an inch and a half broad, thin, brittle, whitish, slightly muricate at the larger end, with an accessory valve at the hinge: *hinge* reflected, ſmooth: *teeth* slender, incurved, with an erect proceſs in one valve on the margin above the tooth.

174. Ph. *striata.* Somewhat conic, strongly reticulate on the upper part, irregularly striate on the lower.

Donovan's Shells t. 117. *Chemn. Conch.* 8. *t.* 102. *f.* 864-866.

Shell half an inch long, 3 quarters broad, white, the striæ here and there decussate, the part about the hinge ſmooth, the lower-end gaping : *tooth* long, slender, much curved.

B. *Bivalves.*

36. MYA.

175. M. *Glycemeris.* Oblong-oval, coarse, lamellar, with transverse wrinkled striæ, gaping at both ends, obliquely truncate before and behind the beak : primary tooth of the hinge very thick.

Donovan t. 143. *Lister t.* 414. *f.* 258.

Shell 5 inches long, 8 or 9 broad, grey or ochraceous, with an irregular margin : *beak* nearly central, slightly indented both sides : *hinge* with a lesser tooth and a ſeries of wrinkles.

176. M. *truncata.* Suboval, truncate and much gaping at the smaller end : tooth broad, thick, very obtuse, projecting, erect.

Br. Zool. t. 41. *f.* 14. *Donovan t.* 92. *Da. Cost. t.* 16. *f.* 1.

Shell 2 inches and a half long, 3 and a half wide, covered with a yellowish skin, white under the skin, marked with concentric wrinkles.

177. M. *arenaria.* Oval, rounded behind : tooth broad, thick, very obtuse, projecting, erect, with a small lateral-one.

Donovan t. 85. *Br. Zool.* iv. *t.* 42.

Shell 2 inches and a half long, 3 wide, covered with a brown skin, concentrically wrinkled : reſembles the last, except in not being truncate at the gaping end ; *tooth* with a projection near the baſe.

178. M. *margaritifera.* Oblong, slightly kidney-shaped, decorticated near the hinge, with a single tooth in one valve locking into a forked one in the other.

Donovan t. 73. *Br. Zool. t.* 43. *Da Costa t.* 15. *f.* 3.

Shell 2 inches long, 5 broad, a little contracted in the middle at the thinner end, thick, covered with a black skin which is worn off on the protuberant parts near the hinge, transverſely wrinkled, pearly greenish within : *teeth* strong.

179. M. *Pictorum.* Oval, in each valve a broad crenate tooth, with 2 lateral laminae in one valve, and one in the opposite locking into each other.

Donovan t. 89. *Brit. Zool. tab.* 43. *f.* 17.

Shell nearly 2 inches long, and 4 broad, dull green, nearly black at the ſmaller end, concentrically wrinkled, pearly within : *beak* near the larger end.

180. M. *ovalis.* Oval-oblong, rounded at both ends : teeth crenate, a single one and lateral lamina in one valve, and a forked one and 2 laminae in the other

Donovan t. 174. *Chemn. Conch.* 6. *t.* 1. *f.* 6.

Shell an inch long, nearly 2 wide, olive-green, concentrically wrinkled, a little indented in front, pearly within : *beak* near one end : *hinge* nearly straight.

181. M. *dubia.* Oval, thin, brittle, gaping, light rufous, with the rudiment of a tooth in one valve projecting inwards.

Brit. Zool. t. 44. *f.* 19. *Donovan t.* 108.

Shell not an inch long, shaped like a piſtachia nut, with a large oval gape opposite the hinge, concentrically striate, ſometimes with yellowish rays, sloping at the anterior end, white within: *beak* near one end.

182. M. *inequivalvis.* Somewhat triangular, strong, white, with the under-valve much larger.

Montague p. 38. *Walk. min. Shells. f.* 35. Cardium.

Shell 4 lines wide, thick, opake, tranſverſely striate, often covered with a brown skin; the upper-valve not half the size of the other and obſcurely striate, the under-valve deep: *beak* central, very prominent: *tooth* strong, erect, slightly recurved, without lateral-ones.

183. M. *suborbicularis.* Nearly orbicular, yellowish-white: in one valve a single tooth locking into a double one in the other, with a laminate tooth in each valve behind the beak.

Montague British Shells. p. 39. *n.* 8.

Shell 4 lines long, and about 5 broad, ſomewhat pellucid, often covered with a brown skin, faintly striate tranſverſely: *beak* ſmall, pointed, turning to one side: *valves* cloſed.

184. M. *declivis.* Oval, thin, brittle, suddenly sloping near the gaping end: valves with each a broad tooth-like plate projecting inwards.

Donovan. t. 82. *Montague p.* 48. *n.* 9. M. pubeſcens.

Shell about 2 inches broad, 1 and a quarter long, whitish, truncate at the ſmaller end, slightly striate concentrically, one valve turning up behind the slope and embracing the edge of the other: *beak* nearly central, turning a little sideways.

185. M. *prætenuis.* Oval, flat, thin, brittle, a little gaping: valves with a single tooth in each, hollowed in the midddle, projecting horizontally inwards, and closing over each other.

Montague Brit. Shells. tab. 1. *f.* 2. *Donovan. t.* 176.

Shell an inch broad, half as much long, whitish, with a few concentric striæ, not truncate: *beak* ſmall, pointed, turning to one side, nearly central.

186. M. *distorta.* Oval, thin, brittle, convex, rugged, distorted: valves with a broad subtriangular tooth in each, hollowed in the middle, projecting horizontally inwards.

Montague Brit. Shells. p. 42. *tab.* 1. *fig.* 1.

Shell an inch broad, nearly as much long, oval more or leſs inclining to orbicular, white, indented at the margin and variously distorted, not truncate: *beak* projecting, nearly central, not turning to one side.

187. M. *bidentata.* Suboval, thin, compressed, smooth: hinge with 2 broad erect laminate teeth in one valve standing obliquely, and none in the other.

Montague Brit. Shells, p. 44.

Shell the eighth of an inch long, rather more broad, dirty white, without striæ: *beak* ſmall, near one end, a little reclined: *teeth* rather distant from each other, with a ſmall hollow between them.

37. SOLEN. *Razor-sheath.*

188. S. *Siliqua.* Linear, straight: hinge with a single

tooth in one valve, and a lateral lamina; in the other valve two, with a lateral inclined lamina.

Br. Zool. t. 45. *f.* 20. *Donovan. t.* 46. *Da Coſt. t.* 17. *f.* 5.

Shell an inch long, 8 broad, truncate at one end, a little rounded at the other, olive-brown, grey with purpliſh bands when worn, divided diagonally by a conoid cinereous mark, one part striate longitudinally the other tranſverſely :*hinge* near one end.

189. S. *Novacula.* Linear, straight: hinge with a strong obtuse curved tooth in each valve, without lateral laminæ.

Montague Brit. Shells, p. 47.

Shell reſembling S. Siliqua, except in the teeth.

190. S. *Ensis.* Linear, a little bowed: hinge with a single tooth and lateral lamina in one valve, locking into two teeth and a double lamina in the other.

Br. Zool. t, 45. *f.* 22. *Donovan t.* 50. *Lister t.* 411. *f.* 257.

Shell hardly an inch long, about 5 broad, coloured divided and striate like S. Siliqua, truncate and a little rounded at both ends: *hinge* at one end.

191. S. *Vagina.* Linear, straight, a little reflected at the end next the hinge: in each valve a single compressed tooth without laminæ.

Br. Zool. t. 46. *f.* 21. *Donovan. t.* 110. *Barbut t.* 2. *f.* 4.

Shell 3 quarters of an inch long, about 4 broad, orange-yellow, striate longitudinally, rather truncate at both ends: *hinge* cloſe to one end.

192. S. *pellucidus.* Oblong, slightly bowed, pellucid: hinge with a single tooth in one valve locking into 2 in the other, with a lateral lamina in each.

Brit. Zool. t. 46. *f.* 23. *Donovan. t.* 153.

Shell a quarter of an inch long, about an inch broad, thin, brittle, covered with a greeniſh skin, rounded at each end.

193. S. *Legumen.* Straight, linear-oblong: hinge near the middle, with a single tooth in one valve, and 2 in the other, and a hook-like process in each, pointing towards the cartilage.

Br. Zool. t. 46. *f.* 24. *Donovan t.* 53.

Shell nearly an inch long and 3 broad, thin, white or covered with a yellowiſh skin, rounded at both ends, radiate from the hinge to the margin.

194. S. *antiquatus.* Oblong, a little contracted opposite the hinge: hinge central, a single subulate tooth in one valve, locking between two in the other.

Donov. t. 114. *Br. Zool. t.* 46. *f.* 25. S. Cultellus.

Shell near an inch long, 2 broad, thin, white or covered with a yellowiſh-brown skin, ſemitranſparent, concentrically striate, rounded at the ends: *teeth* projecting beyond the margin, in one valve a single ſubulate one, in the other two, one of which is ſubulate, the other broad.

195. S. *minutus.* Suboval, transversely wrinkled: valves with each 2 rows of concave spines running from the beak.

Montague. Brit. Shells. t. 1. *f.* 4. *Chemn. conch.* 6. *t.* 6. *f.* 51. 52.

Shell a quarter of an inch long, half an inch broad, whitiſh, truncate cloſe to the hinge, with generally dissimilar valves.

196. S. *vespertinus.* Oval-oblong with pale purple rays:

hinge nearly central with a single tooth in one valve locking between 2 in the other, and a projecting lamina in each.

Br. Zool. t. 47. *f.* 27. *Donovan t.* 41. *f.* 2. Tellina.

Shell an inch and a quarter long, nearly 2 and a half wide, white or pale flesh-colour, radiate with purple from the beak, concentrically striate, purplish within.

197. S. *squamosus.* Nearly orbicular, flat, thin, pellucid, minutely punctured: hinge central, with 2 double teeth diverging each side.

Montague Brit. Shells. p. 565.

Shell 4 lines long, half an inch broad, white with a few concentric striæ, within with obſcure rays from the hinge: *teeth* erect, a furrow on the margin dividing each into two laminæ nearly to the beak, where they unite and form an acute angle.

198. S. *Pinna.* Suboval, pellucid, semicircular opposite the hinge: hinge running straight from the beak and connecting the valves nearly to the end: in each valve a blunt tooth running straight from the beak.

Montague Brit. Shells. p. 566. *tab.* 16. *f.* 3.

Shell 4 lines long, 3 quarters of an inch broad, thin, brittle, white, strongly wrinkled concentrically, ſmaller and declining a little towards the beak: *valves* one a little convex, the other ſomewhat concave: *beak* ſmall, near the ſmaller end: *teeth* not locking into one another.

38. TELLINA.

199. T. *Ferroensis.* Oblong-oval, flat, radiate with red and white and finely striate transversely: hinge without lateral teeth.

Da Costa t. 14. *f.* 1. *Donovan. t.* 60. *T. trifasciata.*

Shell 3 quarters of an inch long, an inch and a half broad, more produced and obliquely truncate on the fore-part: *teeth* 2, oblique, in each valve: *beak* ſmall, nearly central, with an oblique elevated ridge running down to the end where it forms an angle.

200. T. *squalida.* Sub-oval, flat, pointed at the small end, paleyellowish, faintly striate concentrically: hinge with 2 teeth in one valve and 3 in the other, the lateral one remote and laminate at the base.

Donov. t. 163. *Montague Brit. Shells. p.* 56.

Shell an inch long, an inch and 3 quarters broad, thin, ſometimes covered with a brown skin; one valve reflecting a little at the ſmall end and forming a depression on the ſurface, the other turning inwards to correſpond: *beak* ſmall, central.

201. T. *læta.* Oval-oblong, flat, equilateral, with strong concentric striæ: hinge with 3 teeth and a remote lateral lamina, the outer tooth on the anterior side cloven.

Donovan t. 123. T. inequistriata. T. punicea. *Gmel.*

Shell 3 quarters of an inch long, an inch and 4 lines broad, yellowish-white or pale roſy, unequally striate, equivalve: *beak* ſmall, pointed: *hinge* in the middle.

202. T. *donacina.* Sub-oval, flattish, much sloping on the anterior-end, nearly smooth, semipellucid: hinge with 2 teeth in one valve, and one in the other.

Chem. Conch. 6. *t.* 12. *f.* 119. *Linn. Trans.* viii. *t.* 1. *f.* 7.

Shell half an inch long, 3 quarters broad, yellowish radiate with red, obſcurely striate : *beak* ſmall, nearer to one end : *teeth* in one valve 2, that behind the beak extending into a lateral lamina.

203. T. *tenuis*. Sub-oval, flat, thin, glossy, slightly striate, somewhat pointed at the anterior end : hinge with a lateral laminate tooth in one valve.

Donov. t. 19. *f.* 2. *Br. Zool. t.* 48. *f.* 29. T. planata.

Shell half an inch long, 3 quarters broad, ſemipellucid, brittle, whitish, yellow, or red, with a few concentric striæ and lighter bands : *beak* ſmall, nearly central.

204. T. *striata*. Suboval, flat, thin, semipellucid, finely striate, rosy white : hinge with a lateral laminate tooth in both valves.

Chemn. Conch. 6. *t.* 12. *f.* 117. *Montague. Brit. Shells. p.* 60.

Shell an inch long, 6 lines broad, roſy-white, within roſy white round the margin, indented at the slope : *beak* ſmall, pointed, nearly central : differs from T. tenuis in its regular tranſverſe striæ, and its thick lateral teeth.

205. T. *Fabula*. Oval, compressed, a little produced at one end, one valve obliquely striate longitudinally, the other smooth : beak turning a little to one side.

Donovan. t. 97. *Montague p.* 61. *n.* 7.

Shell 6 lines long, an inch broad, bluish-white or yellow, thin, pellucid, rounded at one end, produced to a point at the other, contracted at the margin near the ſmaller end : *beak* ſmall, nearly central, pointed, turned a little to one side : *hinge* with 3 teeth in one valve and 2 in the other.

206. T. *similis*. Oval, compressed, rounded at both ends, both valves obliquely striate longitudinally five-sixths of their surfaces : beak not curved.

Sowerby Brit. Miscell. ii. *tab.* 75.

Shell reſembling the last, except in having both valves diagonally striate over nearly the whole ſurface, in not being produced to a point at the ſmaller end and not contracted near it, and in having the beak straight.

207. T. *solidula*. Suborbicular, a little convex, produced at one end ; hinge with 2 small teeth in each valve.

Br. Zool. tab. 49. *f.* 32. *Da Costa t.* 12. *f.* 4. *Montag. p.* 63.

Shell 3 quarters of an inch long, rather more broad, strong, white or red, with often intermediate shades, often variegated with concentric red yellow or whitish bands: within glabrous, red, white, or yellow : *beak* nearly central.

208. T. *fausta*. Suborbicular, rather compressed, semipellucid, finely striate : hinge with strong lateral teeth, the primary one in each valve cloven.

Donovan tab. 98. *Linn. Trans.* viii. *t.* 1. *f.* 8.

Shell 3 inches long, a little more broad, white, with a bend at the posterior margin : *beak* ſmall, nearly central, not turning to one side.

209. T. *crassa*. Suborbicular, flat on the upper-valve, strong, thick, closely striate : hinge with 2 teeth in each valve, one of which is cloven, and 2 lateral teeth in the deeper valve.

Br. Zool. t. 48. *f.* 28. *Donov. t.* 103. T. rigida.

Shell 2 inches long, an inch and a half broad, yellowish-white with pale pink rays, the lower-valve convex.

210. T. *reticulata*. Suborbicular, subdiaphanous, com-

pressed, finely reticulate: hinge with 2 small central teeth, and broad lateral laminate ones.

Barbut Shells. t. 3. *f.* 6. *Linn. Trans.* viii. *t.* 1. *f.* 9.

Shell an inch and a quarter long, a little more broad, yellowish white, with numerous raiſed concentric striæ crossed by fainter ones: *beak* ſmall, prominent, nearly central, turning a little one way.

211. T. *Radula.* Suborbicular, a little convex, rough with numerous sharp concentric striae: hinge with 2 teeth is each valve, without lateral ones.

Montague t. 2. *f.* 1. 2. *Donov. t.* 130. Venus borealis.

Shell an inch and a half long, nearly as much broad, white, with ſometimes roſy bands, with a heart-shaped cavity under the beak, and a flexuous one at the posterior end: *beak* central, turning a little to one side.

212. T. *bimaculata.* Subtriangular, rounded, faintly striate, with a deep red spot each side the beak: hinge with primary and lateral teeth.

Donovan t. 19. *f.* 1 *Lister. t.* 385. *f.* 232.

Shell half an inch long, 6 lines broad, whitish, with the red ſpots deeper on the inside, ſometimes marked with a few purple rays: *beak* a little oblique: *teeth* large.

213. T. *lactea.* Orbicular, thin, convex, irregularly striate, white: hinge with 2 teeth in one valve and one in the other, and a deep lateral groove in each valve.

Montague t. 2. *f.* 4. *Petiv. Gaz. t.* 93. *f.* 18.

Shell 3 quarters of an inch long, about as much broad, with a few irregular wrinkles: *beak* ſmall, oblique.

214. T. *rotundata.* Orbicular, rather convex, thin, subpellucid, obscurely striate: teeth 2 in each valve, one of them cloven, the other slightly diverging.

Montague Brit. Shells. p. 71. *tab.* 2. *f.* 3.

Shell about an inch wide, white, rather glossy, ſometimes a little narrower at one end: *beak* ſmall, oblique.

215. T. *flexuosa.* Suborbicular, convex, thin, pellucid, finely striate, with a groove across ending in an indenture in the margin: hinge with an obsolete tooth.

Donovan Brit. Shells. t. 42. *f.* 2. Venus sinuosa.

Shell not half an inch acroſs, white, with a groove from behind the beak running parallel with the cartilage slope and forming a flexure in the margin: *beak* much produced, oblique: *hinge* with a groove along the margin.

216. T. *carnaria.* Suborbicular, a little produced at one end, pale rosy, striate in a concentric oblique and transverse direction: hinge with 2 teeth in one valve, one of which is cloven, and one in the other.

Donovan t. 47. *Chemn Conch.* 6. *t.* 13 *f.* 126.

Shell above half an inch long, a little more broad, often marked with deeper concentric belts, within rosy, finely striate in 3 directions: *beak* nearly central, rather oblique: *hinge* with remote lateral laminate teeth.

217. T. *inequivalvis.* Oblong, much produced towards the beak, one valve nearly flat, the other convex: hinge with 2 teeth, without lateral ones.

Donovan t. 41. *f.* 1. *Chemn. Conch* 6. *t.* 11. *f.* 206. *a--d*

Shell half an inch long, an inch broad, white, ſub-pellucid, arched along the cartilage slope, rounded at the larger end.

218. T. *maculata.* Suboval, thickish, decussately striate, with irregular spots.

Adams Linn. Trans. iii. *p.* 252

Shell with the ſpots dissimilar in different ſpecimens, but perfectly alike in both valves.

39. CARDIUM. *Cockle.*

219. C. *aculeatum.* Convex, slightly truncate and produced on one side, with about 21 ribs grooved down the middle and beset towards the margin with strong spines.

Br. Zool. t. 50. *f.* 37. *Donovan t.* 6. *Barbut t.* 3. *f* 10.

Shell about 4 inches wide, yellowish-brown with rufous bands or marks, rounded and tubercled on the anterior side, a little truncate on the other: *ſpines* increasing in size towards the larger end.

220. C. *spinosum.* Convex, tender, abruptly truncate and produced at one end, with 20 prominent ribs armed with long flat sharp spines.

Sowerby Brit. Miscell. 1. *tab.* 32.

Shell reſembling C. aculeatum, but is more tender and abruptly truncate, pale rufous: *ſpines* prickly, ſomewhat flattened longitudinally with the shell, the larger-ones furrowed, thoſe on the narrow side curved towards the hinge, thoſe of the broader side curved from the hinge.

221. C. *echinatum.* Convex, rounded, with about 18 carinate ribs beset with numerous close-set convex spines.

Donovan t. 107. *f.* 1. *Da Costa t.* 14. *f.* 2.

Shell 2 inches and a half wide, differing from C. aculeatum in being quite rounded and in not having the ribs grooved, and from C. ſpinoſum in not being truncate and in having the ſpines shorter and more obtuſe.

222. C. *ciliare.* Orbicular, thin, with about 18 sharp 3-sided ribs beset with short flat pointed spines.

Donovan t. 32. *f.* 2. *Br. Zool.* iv. *t.* 50. *f.* 39.

Shell about 3 quarters of an inch long, brittle, whitish, with flat grooves.

223. C. *tuberculatum.* Convex, strong, thick, with about 20 obtuse tubercled transversely striate ribs.

Donovan t. 107. *f.* 2. *Lister. Conch. t.* 329.

Shell convex, ponderous, generally brown with darker bands; the ribs ſprinkled with a few knobs.

224. C. *nodosum.* Flat, suborbicular, with 24 ribs covered with close-set obtuse tubercles.

Montague Brit. Shells. p. 81. *n.* 6.

Shell 3 quarters of an inch wide, reddish-white, strongly toothed on the margin, glossy-white within.

225. C. *lævigatum.* Somewhat oval, strong, with obsolete longitudinal striæ, and a few transverse wrinkles concealed by a thin cuticle.

Br. Zool. t. 51. *f.* 40. *Donov. t.* 54. *Da Cost. t.* 3. *f.* 6.

Shell 2 inches and a half long, 2 inches broad, flesh-colour beneath the skin, generally deep red or variously marked, denticulate on the margin within.

226. C. *edule*. Antiquated, a little produced at one end, with obsolete recurved scales, and about 26 depressed ribs.

Br. Zool. t. 50. *f.* 41. *Donov. t.* 124. *Da Cost. t.* 11. *f.* 1.

Shell hardly 2 inches wide, yellowish-white or bluish, rarely equilateral, a little rough near the circumference.

227. C. *rusticum*. Antiquated, a little produced at one end, with about 20 remote ribs, the interstices rugged.

Donovan iv. *t.* 124. *f.* 2. *Barbut. t.* 3. *f.* 12.

Shell reſembling C. edule, except that it is larger, has an evident ridge on the fore-margin when cloſed, a narrow depressure behind the beaks, the ribs fewer and more raiſed, of a ferruginous or livid colour, and bluish within.

228. C. *elongatum*. Compressed, suboval, a little angular, somewhat elongated and angular on one side, with 21 faintly wrinkled and rounded ribs.

Montague Brit. Shells. p. 82. *n.* 7.

Shell a quarter of an inch wide, yellowish-white or light rufous: *beak* not central,

229. C. *exiguum*. Very convex, somewhat triangular, with about 20 tubercled or wrinkled ribs, strongly striate transversely in the interstices.

Donovan. t. 32. *f.* 3. *Walk. minute Shells f.* 83.

Shell about half an inch wide, white or pale rufous, sloped on the anterior side, and produced at one end.

230. C. *medium*. Somewhat triangular, crenate at the sides, with about 26 smooth ribs.

Donovan t. 32. *f.* 1. *Lister t.* 316. *f.* 153.

Shell hardly an inch long, white variegated with cheſnut, a little truncate on one side and produced at one end: *teeth* one in each valve, with strong lateral-ones.

231. C. *rubrum*. Convex, smooth, glossy, pellucid, red: hinge not quite central.

Montague p. 83. *Walk. min. shells.* 862.

Shell hardly 2 lines long, rounded at both ends, with the margin plain: *beak* prominent: *teeth* nearly obſolete, the lateral-ones very visible.

232. C. *discors*. Very convex, suborbicular, glossy, finely striate obliquely: hinge with 2 teeth in one valve.

Montague Brit. Shells. p. 84. *n.* 11.

Shell the size of a pea, white with ſometimes a purple top, carnation within; the striæ reflected into an acute angle on the fore-part; margin plain: *beak* central, leaning a little to one side: *lateral teeth* remote, laminate.

233. C. *muricatulum*. Heart-shaped, opake, white, muricate on the margin.

Walk. min Shell f. 84. *Adams Microsc. t.* 14. *f.* 44.

Shell extremely minute, muricate in front.

234. C. *arcuatum*. Orbicular, thin, brittle, semi-pellucid, with fine regular transverse curved striae.

Montague Brit. Shells. p. 85. *tab.* 3. *f.* 2.

Shell not half an inch wide, white, with a few irregular concentric grooves; the margin slightly crenate: *beak* central, pointed, turning to one side.

235. C. *corneum.* Suborbicular, convex, thin, pellucid, with fine concentric striae, one of which is very distinct.

2. Twice as large, without the prominent groove.

Br. Zool. t. 49. *f.* 36, *Donov. t.* 96. Tellina.

Shell about 4 lines long and ſomewhat broader, white or bluish, often covered with a horn-colour skin, within bluish-white, with tranſverſe black curves, one of which is more distinct; *beak* central, obtuſe: *primary-teeth* hardly any; lateral-ones remote, laminate.

236. C. *amnicum.* Oblique, suboval, convex, somewhat pellucid, transversely grooved.

Don. t. 64. *f.* 2. *Linn. Trans.* iii. *t.* 13. *f.* 37. 38. Tellina.

Shell ſmaller than the last, horn-colour, with the beak placed near one side: *teeth* one in one valve with 2 lateral ones, in the other 2, oblique, with a single lateral-one.

237. C. *lacustre.* Subrhombic, thin, pellucid, smooth, flattish, with an acute projecting beak.

Chemn. Conch. vi. *t.* 13 *f.* 135. Tellina.

Shell 3 lines long, 4 broad, greyish-brown with a white margin, rather compressed: *beak* central, very prominent: *teeth* one in each valve, one of which is cloven, with a lateral tooth each side, and 2 minute laminæ in one valve.

40. MACTRA.

238. M. *solida.* Strong, opake, slightly triangular, with a few concentric ridges and zones.

Br. Zool. t. 51. *f.* 43. *A. Donov. t.* 61. *Da Cost. t.* 15. *f.* 1.

Shell an inch and a half long, an inch and 3 quarters broad, yellowish-white with often yellow or bluish bands, glossy-white within, equal at the sides: *beak* central.

239. M. *subtruncata.* Strong, subtriangular, yellowish-white, transversely striate, slightly truncate on both sides.

Donov. t. 126. *Br. Zool. t.* 52. *f.* 42. M. Stultorum.

Shell 3 quarters of an inch long, an inch broad, a little produced on one side, with ſometimes a few ridges, yellowish-white within, the sides near the beak much turned in: *beak* large, prominent.

240. M. *Stultorum.* Thin, semipellucid, faintly striate, slightly triangular, pale rufous with lighter radiations, within pale purple.

Donovan t. 106. *Br. Zool. t.* 49. *f.* 30. Tellina.

Shell an inch and a half long, an inch and 3 quarters broad, nearly equal at the sides, often covered with a thin skin, irregularly radiate with broad and narrow whitish lines: *beak* central, prominent, often purplish.

241. M. *radiata.* Thin, brittle, somewhat triangular, produced at one end, whitish with regular pale testaceous rays.

Donovan Brit. Shells. v. *tab.* 161.

Shell 2 inches and a half long, nearly 3 wide, thin, brittle, dirty white with a dull rufous tinge, and radiate with numerous equidistant narrow teſtaceous rays, finely striate tranſverſely: *beak* prominent, rather oblique.

242. M. *dealbata.* Oval, thin, brittle, pellucid, white,

finely striate, with a few coarser wrinkles, gaping a little at the smaller end.

Montague Brit. Shells. p. 95. *tab.* 5. *f.* 1.

Shell an inch long, an inch and a half broad, a little produced at one end, with a sharp plain margin: *beak* rather oblique: *middle-tooth* in one valve broad, forked, angular, cloſe to the beak.

243. M. *compressa.* Suboval, subtriangular, thin, flat, semipellucid, irregularly wrinkled: in one valve a single tooth locking into a cloven one in the other.

Donovan t. 64. *f.* 1. Tellina plana. *Da Cost. t.* 13. *f.* 1.

Shell an inch and a half long, 2 broad, yellowish-white, or pale ferruginous, often with dark bands: *beak* ſmall, central: *hinge* without lateral teeth: *cavity* at the cartilage large, triangular.

244. M. *Boysii.* Oval, flat, thin, pellucid, glossy-white, nearly smooth: beak oblique, a little turned.

Montague. t. 3. *f.* 7. *Linn. Trans.* iv. *t.* 16. *f.* 9-12.

Shell half an inch long, 3 quarters broad, with ſometimes a few obſcure striæ: *teeth* one in each valve, with a broad lateral tooth in one valve only: *cartilage* thin, long.

245. M. *triangularis.* Subtriangular, opake, white, smooth: hinge with a large cloven tooth in one valve, in the other two small ones with a triangular cavity between them.

Montague Brit. Shells. p. 99. *tab.* 3. *f.* 5.

Shell 3 lines broad, 2 long, a little produced on one side, strongly crenate on the margin within.

246. M. *lutraria.* Oblong-oval, nearly smooth: hinge without lateral teeth, in one valve a small and large triangular cavity, in the other a cavity and raised triangular tooth.

Br. Zool. t. 52. *f.* 44. *Donovan t.* 58. *Linn. Tr.* vi. *t.* 16. *f.* 3. 4.

Shell above 2 inches long, 4 broad, yellowish-white with pale bands, ſometimes with a few striæ, gaping a little at both ends, glossy-white within: *beak* ſmall, nearer the larger end.

247. M. *glauca.* Oval, finely striate, wrinkled at the anterior end, dirty-white, with broad and narrow brownish or glaucous rays.

Donovan Brit, Shells t. 125. *Chemn.* vi. *t.* 23. *f.* 232, 233.

Shell 2 inches and a half long, 3 and a half broad: *beaks* turned backward, with a narrow gape between them.

248. M. *tenuis.* Subtriangular, equilateral, thin, semipellucid, white, wrinkled: hinge with a forked tooth in one valve and a simple one in the other, with lateral teeth in each.

Montague. Brit. Shells. app. p. 572.

Shell a quarter of an inch long, rather more broad: *beak* ſmall, central, produced, straight.

249. M. *hians.* Oblong, strong, rugged, gaping at the smaller end, arched under the beak: beak near the larger end.

Donovan t. 140. *Linn. trans.* vi. *t.* 16. *f.* 5. 6.

Shell 2 inches and a quarter long, 5 broad, opake, dark-brown or grey with often a rufous tinge, very rugged near the open end: *hinge* with a flattish tooth, grooved on the fore-part, locking between two in the other valve, one of which is cloven.

41. DONAX.

250. D. *Trunculus*. Oblong, glossy, finely striate longitudinally, with transverse purple bands, within purple with crenate margins.

Br. Zool. t. 55. *f.* 45. *Donovan. t.* 29. *f.* 1.

Shell 6 lines long, an inch and a quarter broad, yellowish with brown and purple bands: *beak* ſmall, near the abrupt end,

251. D. *denticulata*. Somewhat wedge-form, strong, thick, much truncate at one end, longitudinally striate with the interstices punctured, denticulate on the margin.

Br. Zool. t. 55. *f.* 46. *Donovan tab.* 24. D. crenulata.

Shell 7 lines long, an inch broad, brown yellowish or purple, variously banded and rayed, much sloped at the larger end, purple within: *beak* nearer the larger end: *hinge* with a lateral tooth each side the middle-ones.

252. D. *complanata*. Oblong, smooth, glossy, yellowish with white streaks or spots, and a broad white ray from the beak to the margin.

Montague t. 5. *f.* 4. *Lister t.* 384. *f.* 227.

Shell 6 lines long, an inch and a quarter broad, yellowish or purplish, often covered with a polished skin, rarely with a few obſolete tranſverſe striæ, within purple with the margin ſmooth: *beak* near one end.

253. D. *plebeia*. Oblong, suboval, thick, smooth, glossy, yellowish horn-colour with 2 brown rays from the beak: teeth both strong.

Montague. Brit. Shells. p. 107. *t.* 5. *f.* 2.

Shell about half an inch long, 3 quarters broad, strong, with a few distant concentric striæ, pale and gloſsy within, the margin smooth: *beak* nearer one end: *hinge* with a lateral tooth.

254. D. *castanea*. Strong, thick, with a few irregular transverse ridges, chesnut with a darker curved ray from the beak: one of the teeth small.

Montague Brit. Shells. app. p. 573. *t.* 17. *f.* 2.

Shell a quarter of an inch long, 3 eighths broad, chesnut and gloſsy within with the margin smooth: *beak* obtuse, rather leaning to the longer side: *hinge* with a large and a small tooth in each valve, without lateral-ones.

255. D. *Irus*. Sub-oval, whitish, with transverse waved membranaceous reflected ridges finely striate longitudinally between the interstices.

Donovan t. 29. *f.* 2. *Da Costa t.* 15. *f.* 6.

Shell about the size of a ſmall kidney-bean, ſometimes nearly circular or oblong, opake, rugged, within white or flesh-colour with the margin ſmooth: *beak* ſmall, oblique: *teeth* cloven, one excepted.

42. VENUS.

256. V. *fasciata*. Somewhat heart-shaped, with large broad depressed ridges of equal thickness at both ends: beaks much curved.

Donovan t. 170. *Da Costa tab* 13. *f.* 3.

Shell 10 lines long, an inch broad, variouſly rayed and banded with brown red or yellow, reſembles V. Paphia, but is more rounded, and the ridges are more flattened and not growing obſolets towards the extremities: *beak* central, with a heart-shaped depression beneath it.

257. V. *verrucosa*. Suborbicular, convex, with strong raised ridges forming membranous protuberances towards the outer margin which is crenulate.
Donov. t. 44. *Br. Zool. t.* 54. *f.* 48. *Da Cost. t.* 12. *f.* 1.
Shell about 2 inches long and as much broad, dirty-white with often a rufous tinge, within white, ſmooth, crenulate at the margin, rugged with wrinkled knobs at the sides, in the young shell ſometimes faintly striate longitudinally, *Donov. t.* 115: *beak* central, curved, beneath which is a heart-shaped depression.

258. V. *Gallina*. Somewhat heart-shaped, with obtuse recurved concentric striae and 3 or 4 rufous-brown stripes from the beak: hind-tooth minute.
Br. Zool. t. 56. *f.* 50. *Donov. t.* 68. *Linn. Tr.* vi. *t.* 17. *f.* 7. 8.
Shell about an inch long, one and a quarter broad, ſometimes whitish brown and plain, often with rufous ſpots, but moſt commonly with 3 or 4 broad stripes which are uſually marked with zigzag darker lines, within white with a crenulate margin: *beak* curved, with a heart-shaped depression under it.

259. V. *islandica*. Suborbicular, convex, strong, irregularly striate, covered with a brown skin, within pure white: beak without the depression under it.
Donov. t. 77. *Br. Zool. t.* 53. *f.* 47. *Da Costa t.* 14. *f.* 5.
Shell 3 inches 3 quarters long, 4 and a quarter broad, whitish covered with a glossy yellow-brown skin, within white with a plain margin: *beak* curved to one side: *teeth* 3, the middle-one double, the lateral-one linear oblique, crenulate.

260. V. *Chione*. Somewhat hearted, strong, faintly wrinkled, covered with a smooth glossy chesnut skin, with faint darker rays.
Donovan t. 17. *Da Costa t.* 14. *f.* 7.
Shell 3 inches long, near 4 broad, within glossy-white, with a plain margin: *beak* oblique, turned sideways, with a heart-shaped depression beneath it: *teeth* 4, the 2 middle-ones approximate and lanceolate, the 2 lateral-ones divaricate.

261. V. *exoleta*. Orbicular, strong, with regular close-set striæ, generally pale with obsolete broad rays.
Br. Zool. t. 54. *f.* 49. *t.* 66. *f.* 49. *Donovan t.* 42. *f.* 1.
Shell 2 inches wide, ſometimes white and plain, oftener with broad or narrower pale rays, within ſmooth white with a plain margin: *beak* curved, with a short heart-shaped depression under it.

262. V. *undata*. Orbicular, thin, convex, with fine irregular striae; the margin undulate.
Br. Zool. t. 55. *f.* 51. *Donov. t.* 121. *Linn. Tr. vi. t.* 17. *f.* 17. 18.
Shell an inch and quarter broad, a little more in length, white with a yellowish tinge, within glossy with a plain margin: *beak* a little curved, without depression under it.

263. V. *Casina*. Suborbicular, with transverse acute recurved ridges, crenulate on the hind-margin, slightly channelled behind the depression.
Linn. Trans. viii. *t.* 2. *f.* 1. *Br. Zool. t.* 54. *f.* 48. A.
Shell an inch and a half wide, reſembling V. verrucoſa, but the ridges are more acute, and do not form protuberant knobs at the outer margin, white with angular brownish lines: *plaits* broader or narrower, nearly uniting: *hinge* thick.

264. V. *lactea*. Orbicular, thick, flattish, with regular

thick obtuse raised striae, slightly truncate anteriorly.

Donovan's Brit. Shells v. *tab.* 149.

Shell about an inch and a half wide, white, with very thick obtuſe ridges, a little truncate on one side : *beak* curved.

265. V. *tigerina*. Orbicular, thin, flat, white, striate longitudinally and crossed with numerous fine transverse ones.

Montague p. 119. *t.* 4. *f.* 1. *Lister t.* 337. *f.* 174.

Shell 3 quarters of an inch long, near an inch broad, with ſometimes a purple tinge on the edges, reticulate, glossy-white within with a plain margin : *beak* pointed, a little curved.

266. V. *sinuosa*. Thin, convex, with a very deep sinuosity on the margin in front, the edges of which are obtuse.

Pennant Brit. Zool. iv. *tab.* 55. *f.* 51. A.

Shell 3 quarters of an inch broad, about half an inch long.

267. V. *ovata*. Suboval, somewhat compressed, opaque, brown, strongly striate longitudinally with finer transverse ones,

Br. Zool. t. 56. *f.* 56. *Walk. min. sh. f.* 12. Cardium.

Shell 4 lines long, half an inch broad, reticulate, white or flesh-colour within with the margin slightly crenate : *beak* nearly central, a little curved.

268. V. *minima*. Suborbicular, glossy, with broad concentric striae, flesh-colour with a red streak each side in the middle near the margin.

Montague Brit Shells p. 121. *tab.* 3. *f.* 3.

Shell a quarter of an inch long, rather more broad, rather compressed, generally with 2 shortened white lines like the letter V, the point of which is at the beak, and at the ends of which is a red streak pointing towards the margin, within glossy-white with the margin plain : *beak* prominent, a little curved.

269. V. *subcordata*. Somewhat heart-shaped, strong, white, with strong longitudinal ribs crossed by remote transverse ones, much sloping on the anterior side from the beak.

Montague Brit. Shells. p. 121. *tab.* 3. *f.* 1.

Shell a quarter of an inch wide, reticulate, with the interstices a long ſquare, within glossy-white slightly crenate on the margin : *beak* nearer one end, much curved.

270. V. *granulata*. Suborbicular, thick, whitish with chocolate and livid marks, strongly ribbed longitudinally and striate transversely, crenate on the margin.

Donovan. t. 83. *Chem. Conch.* 6. *t.* 30. *f.* 313.

Shell 8 lines long, an inch broad, strongly reticulate, variegated with purple and livid ſpots and lines, dark purple within : *beak* curved, with a heart-shaped depression beneath it.

271. V. *deflorata*. Suboval, thin, semipellucid, with undulate longitudinal striae crossed by a few wrinkles, whitish faintly radiate with purple.

Br. Zool. t. 57. *f.* 54. *Chem. Conch.* 6. *t.* 9. *f.* 79.

Shell an inch long, one and 3 quarters broad, white with a yellowish or purple tinge, purplish within : *beak* nearly central and straight.

272. V. *decussata.* Somewhat oval, strong, reticulate, somewhat angular and produced at the anterior side, brown, within white with purple spots near the hinge.

Donovan t. 67. *Br. Zool. t.* 57. *f.* 53. V. litterata.

Shell 2 inches long, 3 broad, often marked with dark zigzag characters or lines, strongly reticulate at the ends: *beak* oblique, beneath which is a lanceolate depression: *hinge* with 3 teeth, 2 of them cloven.

273. V. *Pullastra.* Suboval, finely and regularly decussate, somewhat truncate at the anterior end, brown with zigzag lines or rays.

Linn. Tranſact. vi. *t.* 17, *f.* 13. 14.

Shell very much reſembling the last, but ſmaller, and the striæ are finer and more regular, the cicatrix running down more than half the breadth of the shell, and is constantly marked with grey brown or purple zigzag lines: *teeth* 3, approximate, pectinate.

274. V. *perforans.* Subrhombic, transversely striate, wrinkled on the anterior side, light-brown: 2 of the teeth long, slender, recurved, the middle-one a little cloven.

Montague Brit. Shells p. 127. *tab* 3. *f.* 6.

Shell about 4 lines long, and 6 broad, with rarely fine longitudinal striæ; white within with a plain margin, and generally tinged with purple at the truncate end: *beak* ſmall, a little oblique.

275. V. *virginea.* Suboval, strong, transversely striate with a few deeper furrows, rounded at both ends: middle tooth cloven.

Br. Zool. n. 55. *t.* 55. *fig without number.*

Shell hardly an inch broad, more than an inch long, rufous-brown with ferruginous streaks or ſpots, or with a few rays or zigzag lines, rarely blush-colour with a few longitudinal white streaks; within white with a plain margin, often tinged with blush-colour: *beak* nearer one end, with a lanceolate depression near it.

276. V. *aurea.* Somewhat heart-shaped, strong, with transverse striae crossed by faint longitudinal ones, rounded at both ends: middle tooth cloven.

Br. Zool. t. 57, *f.* 34. *Lister t.* 204. *f.* 249.

Shell an inch long, 4 lines broader, white with brown or blueiſh-black zigzag lines, or mottled with grey, sometimes brown with often a yellow tinge, within yellowiſh-white with a plain margin; front-margin much rounded: *beak* near one end, curved, with a lanceolate depreſsion beneath it.

277. V. *sulcata.* Suborbicular, subangular, strong, flattish, with concentric ridges becoming obsolete at the sides, white or covered with a brown skin.

Montague Brit. Shells p. 131. *n.* 20.

Shell near an inch long and broad, with the grooves broader than the ridges, white within with a crenate margin: *beak* large prominent, a little curved, beneath which is a lanceolate depreſsion: *teeth* large, the middle one much larger, with a deep cavity on each side receiving the 2 teeth of the other valve.

278. V. *scotica.* Somewhat hearted, a little compressed, with regular parallel grooves, and plain margin.

Linn. Trans. viii. *p.* 81. *tab.* 2. *fig.* 3.

Shell half an inch long, and about 3 quarters broad, of a more triangular shape than V. verrucosa and not slightly truncate on the anterior part, whitish, with 15 or 16 obtuse very regular but not membranaceous wrinkles.

279. V. *triangularis.* **Somewhat triangular, equally sloping each side under the beak, yellowish-white, with a few antiquated ridges: in one valve 2 teeth, and a lateral semilunar lamina; in the other 3, 2 of them diverging.**

Montague Bri. Shell. app. p. 577. *tab.* 17. *f.* 1.

Shell half an inch long, nearly as broad; smooth within: *beak* cental, very prominent, a little oblique, with a lanceolate depreſsion under it: one *valve* with 2 strong teeth, one cloven, the other triangular with a semilunar lamina near it; the other valve with 3 teeth.

280. V. *spinifera.* **Suboval, subtriangular, with fine equidistant raised ridges becoming confluent in pairs at the anterior side and forming obtuse reflected spines.**

Montague Brit. Shells. app. p. 577.

Shell half an inch long, rather more broad, yellowish-white, with numerous parallel somewhat reflected ridges ending on the margin of the cartilage slope in short spines, within white smooth: *beak* nearly central, a little turned, with a lanceolate depreſsion beneath it: *hinge* with a single tooth and a small cavity and a remote lateral lamina in one valve; in the other valve 2 teeth.

43. CHAMA.

281. Ch. *Cor.* **Subglobular, heart-shaped, slightly striate, gaping at the anterior slope: beak much incurved.**

Donovan tab. 134. *Lister conch. t.* 275. *f.* 111.

Shell near 3 inches wide, strong, thick, covered with a yellow-brown skin under which it is varied with brown and white, slightly wrinkled transversely, with the margin entire: *beak* reddish, large, prominent, twisted inwards: *hinge* strong, with flattish teeth.

44. ARCA. *Ark-shell.*

282. A. *pilosa.* **Suborbicular, exactly equilateral, faintly striate longitudinally with transverse wrinkles, covered with a villous skin under which it is marked with zigzag brown lines.**

Br. Zool. t. 58. *f.* 58. *Donov. t.* 37. A. Glycymeris.

Shell 2 inches and a half wide, covered with a dark-brown hairy skin, beneath which are chesnut or orange angular stripes; within white with a crenate margin; *beak* prominent, central, straight.

283. A. *Glycymeris.* **Suborbicular, a little irregular, faintly striate, covered with a villous skin, under which it is marked with yellowish spots or bands.**

Linn. Trans. viii. *p.* 95. *tab.* 3. *f.* 3.

Shell resembling the last, but is more gibbous, and not quite equilateral, within white with a crenulate margin; *teeth* about 10, transverse.

284. A. *lactea.* **Rhombic, yellowish-white, covered with a brown hairy skin, closely and regularly striate longitudinally with a few concentric ridges.**

Donovan t. 135. *Br. Zool. t.* 58. *f.* 59.

Shell an inch and a half long, 3 quarters of an inch broad, sometimes reticulate, sometimes rounded at both ends, sometimes a little truncate, within white with a plain margin : *beak* nearly central, incurved.

285. A. *Noæ*. Rhombic, reticulate, notched at top : beak near one end, incurved, very remote, separated by a deep groove.

Donov. t. 153. *Montague tab* 4. *f.* 3.

Shell about half an inch broad, rufous brown, much gaping at the beaks and margin, a little truncate at both ends, within whitish, crenate on the outer margin.

286. A. *minuta*. Oblong, produced at one end into an angular truncate indented beak, rounded at the other.

Donov. t. 78. A. caudata. *Walk. min. sh. f.* 81. A. Modiolus.

Shell 4 lines long, hardly half an inch broad, white or yellowish, finely striate transversely, with 3-4 strong excentric ridges, closed : *beak* small, turning a little towards the angular side.

287. A. *Nucleus*. Subtriangular, produced at one end, concentrically wrinkled and crossed with minute obsolete striae, white, within silvery.

Donovan t. 63. *Linn. Trans.* 6. *t.* 18. *f.* 3-6.

Shell 4 lines long, a little more broad, covered with a gloſsy olive skin : *beak* oblique, under which is a heart-shaped depreſsion : *hinge* angular, with regular pectinate teeth each side : *margin* crenulate within.

45. PECTEN. *Scallop.*

288. P. *maximus*. Ears of equal size : shell with about 14 rounded ribs which are longitudinally grooved.

Br. Zool. t. 59. *f.* 61. *Donov. t.* 49. *Ca Cost. t.* 9. *f.* 3.

Shell 5 inches long, 6 broad ; the upper-valve flat, transversely striate between the ribs, rufous ; lower-valve very concave, yellowish-white ; within whitish, rufous round the margin : *ears* large, rectangular, with decuſsate striæ.

289. P. *Jacobæus*. Ears equal : shell with about 17 angular ribs which are longitudinally grooved.

Br. Zool. t. 60. *f.* 62. *Donov. tab.* 137.

Shell 4 inches long, 5 broad ; the upper valve a little convex, rufous ; the lower white ; transversely striate, within white, a little tinged at the margin : *ears* rectangular, with decussate striæ.

290. P. *opercularis*. Ears nearly equal : shell with about 20 rounded ribs finely striate longitudinally and transversely.

Br. Zool. t. 60. *f.* 63. *Donov. t.* 12. P. subrufus.

Shell nearly orbicular, about 2 inches and a half wide, generally beautifully variegated white red purple or brown, the upper-valve rather convex : *ears* rather unequal, with decussate striæ, ciliate.

291. P. *lineatus*. Ears a little unequal : shell with about 18 narrow rough ribs, white with a purple line down each of the ribs on the upper-valve.

Donov. t. 116. *Da Costa tab.* 10. *f.* 8.

Shell about an inch and a half long, hardly as much broad, white with a purple line down each of the ribs of the upper-valve, lower-valve pure white, transversely striate : *ears* not quite equal, striate.

292. P. *Pusio*. Ears nearly equal : shell equivalve, mostly distorted, with about 40 linear ribs.

Br. Zool. tab. 61. *f.* 65. *Donovan tab.* 34.

Shell about 2 inches long, one and a half broad, generally much distorted and irregular on the surface, with numerous unequal fine ribs, rufous, whitish, or variegated; *ears* sometimes large, sometimes hardly visible.

293. P. *glaber*. Ears equal: shell very thin, with 15 faint rays, within marked with rays divided by a single groove.

Pennant Br. Zool. iv. *p.* 102. *n.* 68.

294. P. *varius*. Ears very unequal: shell with about 12 ribs beset with transverse prickly scales.

Br. Zool. t. 61. *f.* 64. *Donov. tab.* 1. *f.* 1.

Shell about 2 inches wide, 2 and a quarter long, variously coloured and marked, with rough spinous protuberances down the rays especially towards the margin: *ears* very unequal, the larger-one wrinkled and armed beneath with 5-7 spines, the smaller with a double row of spines.

295. P. *obsoletus*. Ears unequal: shell dark purple, with numerous fine longitudinal striae 8 or 10 of which are more prominent.

Br. Zool. t. 61. *f.* 66. *Donovan. tab.* 1. *f.* 2.

Shell hardly an inch long, dark purple with 8 obsolete darker rays, smooth and brownish within, equivalve: *ears* unequal, the larger-one wrinkled and striate.

296. P. *lævis*. Ears unequal: shell flat thin, pellucid, smooth except a few faint concentric ridges.

Montague Brit. Shells. p. 150. *tab.* 4. *f.* 4.

Shell nearly orbicular, about 6 lines long, yellowish-white, purplish-brown, or chesnut, often variegated, within white with the margin crenulate, sometimes striate near the margin: *ears* strongly striate longitudinally and very finely transversely.

46. OSTREA. *Oyster*.

297. O. *edulis*. Suborbicular, rugged, with undulate imbricate scales; one valve flat and entire.

Da Costa tab. 11. *f.* 6. *Linn. Trans.* vi. *t.* 18. *f.* 9. 10.

Shell varying much in size and bulk, generally brown, with unequal valves, the upper-one flat, the lower very convex and rugged transversely striate and often longitudinally ribbed, within pearly white: *beak* rather oblique, with a row of small knobs running down each side.

298. O. *saxatilis*. Suborbicular, very thin, pellucid, a little scaly: the larger-valve with strong longitudinal ribs.

Found adhering to rocks and stones near the low water mark at the Mumbles, and differs from the last in being always very thin and transparent, not so rugged, and in the lower-valve being furnished with strong longitudinal ribs which often end in hollow scales: *Shell* 2 or 3 inches long, variously shaped, but generally suborbicular, oblong, or subtriangular, mostly with a fine purple tinge, within gloſsy white.

47. ANOMIA.

299. A. *Ephippium*. Suborbicnlar, pellucid, with wrinkled undulate plaits, irregularly sinuate on the margin.

Br. Zool. t. 62. *Donov. t.* 26. *Da Cost. t.* 11. *f.* 3.

Shell 2 or 3 inches wide, produced on one side, perlaceous with various tints of green purple violet or yellow, the perforated valve transversely striate.

300. A. *Squamula*. Suborbicular, thin, membranaceous, like the scale of a fish, entire, the flat valve transversely wrinkled.

Walker min. Shells. f. 80. *Adams microsc. t.* 14. *f.* 42.

Shell about half an inch wide, whitish, within silvery or tinged with green: *beak* prominent, pointed.

301. A. *aculeata*. Suborbicular, thin, longitudinally striate, rough with small concave obtuse spines.

Montague Brit. Shells. p. 157. *tab.* 4. *f.* 5.

Shell about 4 lines wide, dirty-white; with interrupted longitudinal striæ: *beak* smooth, recurved.

302. A. *undulata*. Suborbicular, pellucid, with fine irregular undulate longitudinal smooth striæ, crossing transverse curved ones.

Donovan t. 45. *Da Costa t.* 11. *f.* 4. Ostrea.

Shell an inch or rather more wide, whitish, within perlaceous or greenish, mostly undulate on the margin, sometimes finely striate transversely: *beak* small, pointed: *aperture* large, oval,

303. A. *cymbiformis*. Oblong, coarse, slightly striate, with the beak incurved, perforated on the flatter valve.

Linn. Trans. viii. *p.* 104. *tab.* 3. *f.* 6.

Shell 5 eighths of an inch long, 3 eighths broad, whitish, very tender.

48. MYTILUS. *Mussell.*

304. M. *edulis*. Oblong-oval, nearly smooth, pointed and slightly carinate at the beak, truncate and a little curved on one side.

Br. Zool. t. 63. *f.* 73. *Donovan t.* 128. *Da Costa t.* 15. *f.* 5.

Shell about 3 inches long, half a one broad, blackish blue covered with a brown or yellowish skin, sometimes radiate with blue, rounded at the bottom, within white in the middle, blue about the margin.

305. M. *incurvatus*. Oblong-oval, nearly smooth, much curved on one side under the hinge, beneath broad and produced on the same side.

Br. Zool. t. 64. *f.* 74. *Lister Conch. t.* 357. *f.* 195. 196.

Shell resembling the last, except that it is less, the beak is more truncate; under which on one side it is very crooked and then greatly dilated, covered with a thick rough skin, within violet.

306. M. *pellucidus*. Oval, smooth, open, pellucid, whitish or blackish radiate with deep blue or purple.

Br. Zool. t. 63. *f.* 75. *Donovan tab.* 81.

Shell 2 inches long, one wide, a little gibbous on one side, covered with a yellow skin, within blueish-white radiate with blue.

307. M. *barbatus*. Oval-oblong, roughish, thin, obtuse at the beak, ferruginous-yellow, obliquely clothed with a thick beard on the lower-part.

Br. Zool. t. 64. *f.* 76. *A. Donovan t.* 70.

Shell about 2 inches long, one wide, short, ventricose, the posterior side rising a little above the beak, within white, clothed in an oblique manner with a thick beard on the lower half: *beak* without crenulations within. Probably the young shell of M. Modiolus.

308. **M.** *ungulatus.* Oblong-oval, smooth, incurved and much pointed at the beak: hinge terminal, 2 toothed.

Donovan t. 123. *f.* 2. *Chem. Conch.* 8. *t.* 85. *f.* 756.

Shell about 4 inches long, and 2 broad, bluish-black with a mixture of green, much pointed and incurved at the beak, rounded below: *hinge* with 2-6 teeth besides numerous crenatures on the groove.

309. **M.** *Modiolus.* Oblong, wrinkled, very obtuse at the beak, with a gibbosity each side below it.

Br. Zool. t. 66 *f.* 77. *Donov. t.* 23. *Da. Cost. t.* 15. *f.* 5.

Shell 4 or 5 inches long, 2 or 3 broad, covered with a purplish-black skin, perlaceous within, a little angular on one side, much rounded at the beaks which are rather lateral.

310. **M.** *umbilicatus.* Oblong, contracted into a deep rugged cavity opposite the hinge, forming a deep hollow when the valves are closed.

Br. Zool. tab. 65. *f.* 76. *Donovan tab.* 40.

Shell about 2 inches long, thick, rounded at the beak, blackish, contracted on one side into a deep rugged hollow under the beak.

311. **M.** *rugosus.* Rhombic-oval, rugged, brittle, antiquated, obtuse at both ends.

Br. Zool. tab. 63. *f.* 72. *Donovan tab.* 141.

Shell about an inch and a quarter broad, half as much long, dirty yellow generally covered with a yellowish skin, often gaping and truncate at one end: *beak* ſmall, near the thicker and rounded end.

312. **M.** *præcisus.* Oblong, wrinkled, one valve larger, abruptly truncate at the end near the beak.

Montague Brit. Shells, p. 165. *tab.* 4. *f.* 2.

Shell reſembling the last, except that it is ſquare at the end near the hinge, and one valve is rather larger and receives the other: *beak* large, prominent: *hinge* rugged, inflected, with a hollow under the margin.

313. **M.** *Crista Galli.* Affixed, spinous, compressed, undulately plaited on the margin; both lips rough.

Barbut tab. 11. *f.* 1. 2. *Montague p.* 166.

Shell 2 inches and a half wide, varying in shape, ferruginous or dull purple, deeply plaited on the margin, affixed by the opposite end, striate with raiſed dots, glabrous and horn-colour within, marked with a ſeries of raiſed dots near the margin, armed externally with compressed ſpines which are concave within: *hinge* quite simple, linear, toothless.

314. **M.** *discors.* Oblong-oval, very convex, produced and narrower at the anterior end, striate longitudinally on both sides and transversely in the middle.

Donovan tab. 25. *Linn. Trans.* viii. *p.* 111. *t.* 3. *f.* 8.

Shell an inch and a half wide, 4 lines long, brown, ſemitranſparent, strongly striate longitudinally at the sides and very faintly tranſverſely in the middle, within white or pale pink; margin crenulate at the larger end: *beak* oblique, near the larger end.

315. **M.** *discrepans.* Sub-oval, compressed, rounded and broader at the anterior end, striate longitudinally on both sides and transversely in the middle.

Montague Brit. Shells p. 169. *n.* 11. *Linn. Trans.* viii. *t.* 3. *f.* 9.

Shell reſembling the last, but is less, covered with an olive-green skin, is very slightly convex, rounded and broader at the end remote from the hinge, and has only 8 or 9 ribs on the side near the beak which are double the number in M. diſcors. Is probably only a variety of the last.

316. M. *Cygneus.* Oval, thin, brittle, transversely wrinkled, rounded and compressed at one end, produced at the other: hinge lateral.

Br. Zool. t. 67. *f.* 78. *Donovan t,* 55. *L. Trans.* viii. *t.* 3. *A. f.* 2.

2 much leſs, thick, ponderous, rough, sloping on the fore-part. *Linn. Trans* viii. *p.* 109. *tab.* 3. A. *f.* 3.

Shell 2 inches and a half long, nearly 6 broad, covered with an olive-green skin, under which it is ochraceous or varied with bright brown and sometimes radiate, within pearly-white: *beak* very small, venticose.

317. M. *stagnalis.* Oval, rather smooth, gibbous, with a flat space near the hinge.

Sowerby Brit. Miscell. tab. 16.

Shell 4 inches and a half long, nearly 8 broad, covered with a dark green skin and marked with darker rays: resembles M. Cygneus but is larger, more gibbous, more pointed on one side, and the margin is yellowish-brown.

318. M. *anatinus.* Oval, rather compressed, brittle, semitransparent, with a membranaceous margin, decorticated at the beaks.

Br. Zool. t. 68. *f.* 79. *Donovan t.* 113. *Da Cost. t.* 15. *f.* 2.

Shell 2 inches long, 3 and a half broad, resembles M Cygneus, but is more compreſsed and rounded at the anterior end, and the cartilage side extends in a straight line to an acute angle, and thence continues in an oblique line towards the bottom.

319. M. *Avoensis.* Suboval, thin, wrinkled, olive-brown, straight or slightly arched on the front margin.

Montague p. 172. *Linn. Trans.* viii. *p.* 110. *tab.* 3. A. *f.* 4.

Shell resembling the last, but is much leſs, broader in proportion to its length, not so much produced at the hinge, and the posterior side is more produced and rounded.

320. M. *striatus.* White, pellucid, striate, with lengthened beaks.

Walker minute shells. fig. 75. Shell minute.

49. PINNA. *Nacre.*

321. P. *pectinata.* Thin, pellucid, light horn colour longitudinally ribbed and spinous for half its width, obliquely striate transversely on the other.

Donovan t. 10. *Da Costa t.* 16. *f.* 3. P. muricata.

Shell 6 inches and a half long, 3 inches broad, tapering to the tip and a little curved, rounded at bottom, clothed towards the base with concave spines for half its width, the smooth side a little gibbous on the margin, within smooth pearly.

322. P. *ingens.* Nearly triangular, horn-colour, smooth; longitudinally striate on one side, with very rough scaly wrinkles on the broader end.

Br. Zool. n. 81. *Donovan t.* 152. P. lævis.

Shell near 12 inches long and 7 broad, pointed and curved at the tip, with ſometimes a few faint longitudinal striæ from the top, and rarely with a few concave ſpines; the lower-part rough with laminated tranſverſe wrinkles.

323. P. *muricata.* Thin, semipellucid, flesh-colour, with

broad longitudinal ribs covering the whole surface, and a few concave spines towards the larger end.
Montague Brit. Shells. p. 183. *tab.* 5. *f.* 3.
Shell about 4 inches long and 2 wide, darker at the ſmaller end, straight, a little rounded and oblique at the larger end, with 10 or 12 very broad ribs running the whole length, and a few intermediate ſmaller ones at the narrow end.

C. *Univalves, and more or less spiral.*

50. NAUTILUS.

324. N. *Beccarii.* Spiral with the aperture obovate: whorls 4 or 5, twisted with deep joints.
Adams Microſc. t. 14. *f.* 29. *Walk. min. Shells. f.* 63.
2. With the spires reversed. *Walk. f.* 64.
Shell minute, white covered with a brown skin, crimson when the inhabitant is alive, convex above, flat beneath, with 10 grooved joints in the first spire.

325. N. *crispus.* Spiral, with the aperture semicordate: outer whorl with about 20 flexuous crenate joints.
Adams Micr. t. 14. *f.* 30. *Walk. min. Shells. f.* 65.
Shell minute, opake, white, granulate and marked with flexuous striæ, the outer edge carinate; umbilicate each side, with a central siphon.

326. N. *lævigatulus.* Spiral, semipellucid, white, glossy, with smooth joints.
Adams Micro. t. 14. *f.* 32. *Walk. f.* 67. Minute.

327. N. *rotatus.* Spiral, smooth, with a semicordate apperture, and 6 joints marked with raised flexuous striæ; the keel very entire.
Montague Brit. Shells. t. 15. *f.* 4. N. Calcar.

328. N. *depressulus.* Spiral, opake, white, subumbilicate both sides, with numerous depressed joints.
Adams Micr. t. 14. *f.* 33. *Walk. f.* 68. Minute.

329. N. *umbilicatulus.* Spiral, opake, white, umbilicate, with grooved joints.
Adams Micr. t. 14. *f.* 34. *Walk. f.* 69. Minute.

330. N. *crassulus.* Spiral, thick, white, umbilicate both sides, with fine joints.
Adams Micr. t. 14. *f.* 35. *Walk. f.* 70. Minute.

331. N. *lacustris.* Spiral, smooth, pellucid, horn-colour, with 4 whorls bordered on the outer edge with an opake whitish spiral line.
Philos. Trans. 76 *t.* 1. *Montague t.* 6. *f.* 3.
Shell about 2 lines broad, compreſsed, slightly carinate, sometimes rufous brown, with 3 joints in the outer whorl, flat and deeply umbilicate beneath: *aperture* semiovate.

332. N. *lobatulus.* Spiral, lobed, flattish, confluent, warty, with semilunar very thin partitions.
Adams Microſc. p. 642. *tab.* 14. *f.* 36.
Shell minute, white or yellowish, more or less orbicular or oblong, convex above, flat underneath, with 6-8 parallel lobes: *aperture* very narrow.

333. N. *carinatulus.* Whitish, transparent, carinate, with a narrow oval aperture.
Adams Microſc. t. 14. *f.* 37. *Walker f.* 72. Minute.

Shell minute, arched on the back, with 7 joints.

334. N. *semilituus.* Opake, brown, elongated, slightly arched, incurved at the tip, with raised joints: aperture with a small produced siphon.
Adams Micr. t. 14. *f.* 38. *Walker t.* 73. Minute.

335. N. *Legumen.* Subconic, nearly straight, compressed, jointed, margined on one side, with a lateral siphon.
Montague Br. Shells. supplemen. tab 19. *f.* 6.
Shell minute, cultrate at the tip on one side, slightly curved on the other.

336. N. *rectus.* Opake, brown, nearly straight, smaller at the end; with smooth depressed joints: aperture a small siphon.
Walker minute shells f. 74. *Montague p.* 197.

337 N. *Radicula.* Opake, brown, subconic, nearly straight, with 8 or 9 smooth subglobular joints.
Montague Brit. shells. t. 14. *f.* 6. *t.* 6. *f.* 4.
Shell with sometimes from 2 to 5 joinst, the terminal-one sometimes much produced, sometimes short: *aperture* a small siphon.

338. N. *sbarcuatus.* Glossy-white, pellucid, subcylindrical, slightly curved, with 3 globular joints, the rest hardly defined.
Montague Brit. Shells. p. 198. *t.* 6. *f.* 5. Minute.
Shell often covered with a brown skin, and varying in having sometimes 10 distinct joints.

339. N. *jugosus.* Opake, brown, subcylindrical, slightly curved, with 9 subglobular ridged joints.
Montague Brit. Shells. t. 14. *f.* 4. Minute.

340. N. *costatus.* Subcylindrical, straight, with 12 raised joints furnished with 4 equidistant strong ribs running the whole length of the shell.
Montague t. 14. *f.* 5. Joints sometimes only 6.

51. CYPRÆA. *Cowry,*

41. C. *Pediculus.* With numerous transverse furrows, some of which are forked. *Nun.*
Borl. Cornw. t, 28. *f.* 12. *Donov. t.* 43. *Da Coſta t.* 2. *f.* 6.
2, Smaller, pale, purplish or flesh-colour, without spots.
Borl. Cornw. t. 28. *f.* 13. *Br. Zool. t.* 70. *f.* 82.
Shell above half an inch long, gloſsy, tumid on the back, pale purple or whitish, and generally marked with 2 or 3 dark spots down the back, but sometimes without them, croſsed with transverse raised striæ some of which are divided by intermediate shorter-ones.

342. C. *bullata.* Smooth, white, thin, pellucid, slightly produced at the top into 2 or 3 small convolutions.
Montague Brit. Shells. p. 202. *tab.* 6. *f.* 1.
Shell resembling the last, sometimes without transverse striæ; sometimes faintly striate half way from the back to the inner-lip, the other half finely striate longitudinally; margin of the outer lip not thickened.

52. BULLA.

343. **B.** *lignaria*. Obovate, thin, yellowish-brown, with numerous pale transverse striae; the crown narrower and slightly umbilicate.

Br. Zool. t. 70. *f.* 83. *Donovan t.* 27. *Da Costa t.* 1. *f.* 9.

Shell nearly 2 inches long, with a very large aperture which is contracted at top, white within; *pillar* flexuous and visible up to the crown.

344. **B.** *Ampulla*. Oblong-oval, smooth, glossy, whitish mottled and varied with light-brown; the crown narrower and slightly umbilicate.

Montagne Brit. Shell. p. 206. *tab.* 7. *f.* 1.

Shell hardly half an inch long, with a wide aperture at bottom: *pillar* not visible to the end: *spire* none.

345. **B.** *patula*. Oblong, glossy white, smooth, lengthened at each end into a canal, slightly umbilicate at top.

Br. Zool. tab. 70. *f.* 85. *A. Donov. t.* 142. *descrip. t.* 143.

Shell about an inch long, involute, the aperture narrower towards the top, produced at both ends, one end more elongated, with a flat margin: *pillar* twisted.

346. **B.** *aperta*. Suborbicular, pellucid, white, faintly striate, almost entirely open.

Donovan t. 120. *f.* 1. *Da Costa tab.* 2. *f.* 3.

Shell about half an inch long thin, brittle: *pillar* small, slightly involute, visible to the end.

347. **B.** *Halioloidea*. Suboval, pellucid, white, slightly striate; the aperture closed at the top where it is twisted sideways into 2 whorls.

Montague t. 7. *f.* 6. *Vign.* 2. *f.* 6.

Shell 3 quarters of an inch long, half an inch broad, thin, very open but closed and twisted obliquely at the top.

348. **B.** *Plumula*. Ovate-oblong, depressed, pellucid, yellowish-white, concentrically wrinkled, almost entirely open, rounded and convolute with a single turn at top.

Montague tab. 15. *f.* 9. *Vign.* 2. *f.* 5.

Shell half an inch long, a quarter broad, and nearly as broad at top, tinged with brown at one end, wrinkled within, open over the whole shell: *pillar-lip* slightly turned in.

349. **B.** *Catena*. Ovate, white, pellucid, transversely striate, almost entirely open, obtuse at top with a single turn.

Montague t. 7. *f.* 7. *Linn. Trans.* v. *t.* 1. *f.* 6--8.?

Shell minute, with chain-like striæ, slightly umbilicate.

350. **B.** *emarginata*. Pellucid, smooth, gibbous, with the aperture emarginate and the lip slightly arched.

Adams Linn. Trans. v. *tab.* 1. *f.* 9. 10. 11. Minute.

351. **B.** *denticulata*. Oblong, white, pellucid, nearly equal, obtuse, smooth; the aperture at top ending in a very acute tooth.

Adams Linn. Trans. v. *tab.* 1. *f.* 3. 4. 5. Minute.

352. **B.** *Hydatis*. Oval, brittle, subpellucid, tumid,

slightly wrinkled longitudinally, umbilicate at top without volution.

Montague Vign. 1. *f.* 1-5. *Da Costa t.* 1. *f.* 10. *Donovan t.* 88.

Shell an inch long, 3 quarters broad, very open but contracted at the upper end, greenish or yellowish-horn-colour, ſometimes finely striate tranſverſely : *pillar* not visible to the end.

353. B. *Akera.* Oval, membranaceous, horn-colour, with a convolute truncate channelled crown.

Donovan t. 79. B. resiliens.

Shell about 3 quarters of an inch long, nearly half broad, pellucid elastic, slightly wrinkled tranſverſely, white within: *aperture* much contracted at top : *pillar* visible to the end.

354. B. *cylindracea.* Cylindrical, slender, smooth, white, deeply umbilicate; aperture very narrow, a little dilated at the base.

Br. Zool. t. 70. *f.* 85. *Donovan t.* 120. *f.* 2. *Mont. t.* 7. *f.* 2.

Shell about 6 lines long, 2 broad : *pillar* a little indented, without volutions, but only deeply umbilicate : *aperture* linear, a little wider at the baſe.

355. B. *umbilcata.* Oblong-oval, smooth, white, rounded and umbilicate at the top; aperture very narrow, a little dilated at the base.

Montague Brit. Shells p. 222. *tab.* 7. *f.* 4. Minute.

Shell reſembling the last but is not ſo cylindrical, and its breadth is about one half its length.

356. B. *retusa.* Subcylindrical, opake, white, longitudinally striate on the upper-part, truncate and umbilicate at top; aperture very narrow, a little dilated at the base.

Montague t. 7. *f.* 5. *Linn. Trans.* v. *tab.* 1. *f.* 1. 2.

Shell minute, with conſpicuous involutions.

357. B. *obtusa.* Subcylindrical, opake, white, longitudinally wrinkled, convolute and obtuse at top; aperture narrow, dilated at the base.

Montague tab. 7. *f.* 3. *Walker min. Shells f.* 62.

Shell about 3 lines long, half as much broad, often covered with a cheſnut skin, with 4 or 5 slightly produced whorls; aperture a little compressed in the middle, not reaching quite to the top.

358. B. *diaphana.* Suboval, smooth, pellucid, white, ventricose, with 3 or 4 somewhat pointed whorls at top; aperture closed at top, very open below.

Montague t. 7. *f.* 8. *Br. Zool. t.* 71. *f.* 87 ?

Shell about 4 lines long, 3 broad, slightly produced to a point at top : *pillar* plain, not visible to the end.

359. B. *fontinalis.* Oval, pellucid, light horn-colour, ventricose, with 4 or 5 reversed, hardly produced obtuse whorls; aperture oblong, 3 fourths of its length.

Da Costa p. 96. *tab.* 5. *f.* 6. Turbo adversus.

Shell half an inch long, a quarter broad, ſometimes with a few longitudinal and tranſverſe ridges ; the terminal whorls very ſmall.

360. B. *rivalis.* Oval, pellucid, yellow horn-colour, with 4 or 5 reversed whorls tapering to a fine point: aperture oval-oblong.

Chemn. Conch. 9. *tab.* 103. *f.* 877. 878.

Shell half an inch long, a quarter broad, yellow, very brittle, reſembling B. fontinalis, but is generally larger, exactly oval, the whorls are very obtuſe, and the aperture more contracted towards the top.

361. B. *Hypnorum.* Oval, gloſsy, pellucid, horn-colour, with 5 or 6 reverſed whorls tapering to a fine point, aperture ovate-lanceolate.

Lister t. 1059. *f.* 5. *Walk. min. Shells f.* 54. Turbo.

Shell above half an inch long, a quarter broad: reſembles B. fontinalis, but the body is not ſo ventricoſe, the upper-whorls are produced to a fine point, and the aperture is ſhorter and narrower.

53. VOLUTA. *Mitre.*

A. *With the aperture entire.*

362. V. *tornatilis.* Oval, pointed at each end, ſpirally ſtriate and banded: pillar with a ſingle fold.

Br. Zool. t. 71. *f.* 86. *Donovan t.* 57. *Da Costa t.* 8. *f.* 2.

Shell hardly an inch long, pale red with 2 white bands and numerous longitudinal minute ſtriæ: *whorls* 8, the firſt very large: *aperture* contracted, long.

363. V. *denticulata.* Oval, ſemipellucid, brown, with a raiſed rather pointed ſpire: pillar with 3 or 4 plaits; the lip denticulate.

Donov. t. 138. *Montague Suppl. tab.* 20. *f.* 5.

Shell nearly half an inch long, horny-brown, with a purpliſh top: *whorls* 7 or 8: *aperture* oblong-oval, half the length of the ſhell; the outer-lip with 2 or 3 tubercles. The younger ſhells have a ſingle fold on the pillar-lip, and the lip is without the tubercles.

364. V. *alba.* Oval, white, opake, finely ſtriate longitudinally, with an obtuſe ſpire of 4 whorls, and long narrow aperture.

Adams Microsc. t. 14. *f.* 7. *Walker min. Shells f.* 61.

Shell one tenth of an inch long, with obtuſe whorls.

365. V. *unidendata.* Conic, ſmooth, gloſsy white, with 5 or 6 hardly raiſed whorls: pillar with a ſingle tooth.

Montague Brit. Shells. p. 324. Turbo unidentatus.

366. V. *spiralis.* Conic, gloſsy white, with 4 or 5 whorls; the largeſt with tranſverſe ſpiral ridges half way from the baſe; the reſt finely ribbed longitudinally.

Montagne Brit. Shell. p. 323. *tab.* 12. *f.* 9. Turbo ſpiralis.

Shell minute, pellucid, glabrous, rather obtuſe at top: *whorls* flattiſh, well ſeparated by a fine ſpiral ridge: *aperture* ſuborbicular: *pillar* with a ſingle ſpiral fold.

367. V. *interstincta.* Taper, gloſsy-white, with 5 flattiſh finely ribbed whorls: pillar with a ſingle ſmall tooth.

Montague Brit. Shells. p. 324. *t.* 12. *f.* 10. Turbo.

Shell minute, obtuſe at top: *whorls* with longitudinal ribs, papillous towards the ſeparating line: *aperture* ſuboval.

368. V. *plicata.* Slender, gloſsy white, with 6 ſmooth nearly flat whorls: pillar with a ſingle tooth-like fold.

Montague Br. Shells. p. 325. *Suppl. t.* 21. *f.* 2. Turbo.

Shell minute, taper, ſubpellucid, with a fine ſeparating line, obtuſe at top: *whorls* not ribbed: *aperture* ſuboval, contracted a little to an angle at the upper-part: reſembles V. unidentata, but is more obtuſe, and the pillar instead of a tooth is furniſhed with a single fold on the inside.

369. V. *ambigua*. **Rather taper, white, with 6 or 7 flattish whorls: pillar with an obscure fold: aperture suborbicular.**

Montague p. 325. *Suppl. t.* 21. *f.* 4. Turbo pallidus.

Shell minute, rather pointed, with a well defined ſeparating line: *outer-lip* arched: *pillar* with a ſmall umbilicus formed by the reflection of its lip.

370. N. *pallida*. **Cylindrical, smooth, white, obtuse and hardly whorled at top: pillar with 4 folds.**

Donovan t. 66. *Da Cost. t.* 2. *f.* 7. Bulla.

Shell half an inch long, a quarter broad, oblong-oval, pure white, the upper-whorl extremely ſmall: *aperture* narrow, reaching nearly the whole length. Reſembles Bulla cylindracea, but has an evident ſpire and plaited pillar.

371. V. *catenata*. **Oblong-oval, smooth, white, with 4 opake white bands dotted with red: pillar with 4 folds.**

Montague Br. Shells p. 236. *tab.* 6. *f.* 2.

Shell a quarter of an inch long, ſubpellucid, with 4 opake bands of white oblong ſpots connected in a chain-like manner by ſmall rufous ſpots or ſtreaks: *ſpire* hardly visible, very obtuſe: *outer-lip* dilated, not margined, thick: *aperture* narrow, reaching nearly the whole length.

372. V. *lævis*. **Oval, quite smooth, swelling, with a very short spire: pillar with 2 folds: outer-lip gibbous, slightly denticulate.**

Donovan t. 165. *Montague p.* 203. *t.* 6. *f.* 7. Cypræa.

Shell hardly half an inch long, greenish or yellowish-white, with ſometimes a roſy tinge, rounded and a little reflected at the bottom, gibbous towards the top, with about 3 very short whorls: *aperture* narrow, the whole length of the shell.

54. BUCCINUM. *Whelk.*

373. B. *undatum*. **Oblong, coarse, with deep transverse undulate striæ: whorls 7 or 8, undulately ribbed.**

Br. Zool. t. 73. *f.* 90. *Donov. t.* 104. *Da Cost. t.* 6. *f.* 6.

2. Without the undulate ribs. *Br. Zool. t.* 74. *f.* 91.

Shell about 5 inches long, generally with a rufous tinge, rough: *aperture* oblong-oval.

374. B. *glaciale*. **Oblong-oval, nearly smooth or finely striate transversely: whorls 7 or 8, undulately ribbed, the lower one slightly carinate.**

Donovan Brit. Shells v. *tab.* 154.

Shell reſembling the last, but is more elongated and faintly striate, the outer-lip ſmooth, the larger whorl ſomewhat carinate, and the plaits are visible a little way only beyond the junctures of the whorls: *aperture* oval; *outer-lip* thick, ſpread, finely striate.

375. B. *Lapillus*. **Oval, pointed, rugged, spirally ridged: pillar-lip broad, flattish, impressed near the top.**

Br. Zool. t. 72. *f.* 89. *Donov. t.* 11. *Da Costa t.* 7. *f.* 1-4.

Shell about 2 inches long, with 5 or 6 whorls, white or yellow, with ſometimes a ſpiral yellow or pale cheſnut band or two, when young entirely rough with raiſed hollow membranaceous ſcales, which diſappear on the larger whorl in its advanced stage of growth, when old covered with longitudinal ſcales: *aperture* oval: *outer-lip* thin, slightly crenate, with ſometimes 5 tooth-like projections on the inside one over the other: *pillar-lip* tranſverſely rugged on the outside, with a slight impressed hollow near the top, and projecting into an angle in the middle within.

376. B. *reticulatum.* Oblong-oval, strongly reticulate; the outer-lip toothed, not thickened at the back.

Br. Zool. t. 72. *f.* 92. *Donov. t.* 76. *Da Costa t.* 7. *f.* 10.

Shell nearly an inch and a half long, brown or varying in colour, strongly ribbed tranſverſely and longitudinally, pointed: *outer-lip* rarely without teeth *Br. Zool. t.* 72. *f.* 88; inner-lip broad, glossy: *aperture* oval.

377. B. *Macula.* Oval, reticulate, outer-lip toothed, gibbous at the back: a small dark-purplish spot at the outer edge of the canal.

Montague Br. Shells t. 8. *f.* 4. *Br. Zool. t.* 79.

Shell about half an inch long, varying in colours: *aperture* ſuborbicular; inner-lip broad, faintly denticulate.

378. B. *ambiguum.* Subconic, thick, ochraceous, faintly striate transversely, with strong distant ribs swelling into tubercles at the junctures: outer-lip thickened, slightly denticulate.

Montague Brit. Shells p. 242. *tab.* 9. *f.* 7.

Shell about half an inch long, with 11-15 longitudinal ribs, generally rising into tubercles at the top of each ſpire, ſometimes varied with a few ferruginous ſpots: *inner-lip* folded back, with a tooth-like ridge on the upper part.

379. B. *bilineatum.* Oval, smooth, whitish, with bands of brown spots; the larger-whorl with a double row of tubercles.

Br. Zool. t. 79. *Lister t.* 698 *f.* 63. B. decussatum.

Shell about 2 inches long, with 2-4 bands; upper whorls ſmooth: *aperture* ſuboval; outer-lip slightly toothed, inner rugged and granular.

380. B. *hepaticum.* Oblong-oval, pointed, brownish, strongly ribbed, tubercled near the junctures of the whorls: inner-lip with a tooth-like ridge.

Montague p. 234. *t.* 8. *f.* 1, *Lister t.* 975. *f.* 50.

Shell an inch long, and 5 eighths broad, tapering to a fine point, liver-colour with generally a white band: *whorls* 7 or 8, strongly ribbed, with a tranſverſe depression near the top of each whorl, cutting the ribs into ſmall knobs: *outer-lip* plaited, thick.

381. B. *Perdix.* Suboval, tumid, yellowish-brown undulate with white, with flat transverse ridges: aperture without teeth.

Montague tab. 8. *f.* 5. *Lister Conch. t.* 984. *f.* 43.

Shell about the size of a nut, ſpotted and marbled with white, with broad flat ribs: *whorls* 5 or 6: *pillar* slightly umbilicate; outer-lip thin, not reflected, expanded.

382. B. *lineatum.* Conic, pointed, smooth, with alternate chocolate-brown and white spiral bands.

Donovan tab. 15. *Da Costa tab.* 8. *f.* 5.

Shell a quarter of an inch long, varying in number and diſpoſition of the bands; outer-lip marked by the brown bands on the margin.

383. B. *cinctum.* Conic, white, ribbed, with a filiform rufous brown line round the middle of each spire.

Montague Brit. Shells p. 246. *tab.* 15. *f.* 1.
Shell hardly a quarter of an inch long, cloſely ribbed and obſcurely striate tranſverſely: *outer-lip* denticulate within, with a ſmall rufous ſpot on the edge, and another at the upper-angle of the aperture: *aperture* contracted.

384. B. *minimum.* Conic, chesnut-brown, ribbed, and decussate by transverse striæ: aperture toothless.
Montague t. 8. *f.* 2. *Donovan t.* 179. *f.* 2. B. brunneum.
Shell about 2 lines long, reticulate, with about 5 whorls: *lips* ſmooth.

385. B. *terrestre.* Slender, smooth, glossy, pellucid, white, ending in an obtuse point; the first whorl elongated.
Montague t. 8. *f.* 3. *Walker f.* 60. B Acicula.
Shell a quarter of an inch long, with 6 rather tumid oblique whorls, the first nearly equaling the 3 next: *lips* without teeth,

386. B. *obtusulum.* Ventricose, white, opake, with 3 spires and oval aperture.
Adams Microſc. t. 14. *f.* 25. *Walker f.* 59. Minute,

387. *B. breve.* white, opake longitudinally ribbed and transversely striate, with 5 spires and very short beak.
2. With 3 whorls. *Linn. Tr.* 3. *t.* 13. *f.* 5. 6. B. minutum.
Adams Linn. Trans. 3. *tab.* 13. *f.* 3. 4. Minute.

388. B. *læve.* white, opake, smooth, with a long beak: spires 3, the first more inflated than the second: aperture oval.
Adams Linn. Trans. 3. *t.* 13. *f.* 7. 8. Minute.

389. B. *obtusissimum.* White, opake, smooth, with a long beak: spires 3, the first not larger than the second: aperture contracted.
Adams Linn. Trans. 3. *t.* 13. *f.* 9. 10. Minute.

55. STROMBUS.

390. St. *Pes Pelecani.* Whorls surrounded by a row of tubercles: lip expanded into 4 palmate angular claws.
Br. Zool. t. 75. *Donov. t.* 4. *Da Costa t.* 7. *f.* 7.
Shell nearly 2 inches long, taper, grey or reddish, with 2 rows of ſmaller tubercles on the larger whorl: *outer-lip* much expanded, and gradually becoming divided into 4 channelled angular claws: *ſpire* long, pointed.

391. St. *costatus.* Whorls taper, swelling, with numerous longitudinal ribs, and a raised spiral line at the bottom of each: lip rounded.
Donovan tab. 94. *Da Costa tab.* 8. *f.* 14.
Shell hardly half an inch long, cheſnut-brown, with numerous fine ribs, and a raiſed line at the bottom of each whorl becoming double at the baſe: *aperture* nearly orbicular; the outer-lip a little expanded.

56. MUREX. *Whelk.*

392. M. *despectus.* Oblong, nearly smooth, with the aperture dilated: whorls 8, with 2 raised spiral lines.

Donovan v. *tab.* 180. *Linn. It. Wgoth. t.* 5. *f.* 8.

Shell 3 or 4 inches long, whitish, with hardly visible striæ or wrinkles: *beak* elongated, reflected.

393. M. *carinatus*. **Oblong, smooth, with the beak elongated; whorls 6, with 2 raised spiral lines.**

Donov. t. 109. *Br. Zool. t.* 77. *f.* 96.

Shell 4 inches long, dirty-white: *whorls* sloping down to each other, and not rounded as in the last; the largest with 4 or 5 ridges: *outer-lip* dilated.

394. M. *subantiquus*. **Oblong, strongly striate transversely, with the beak elongated: whorls 8, with 2 raised tubercled spiral lines.**

Donov. iv. *tab.* 119. M. antiquus.

Shell about 4 inches long, of a more rugged and angular appearance than the last, croſsed by undulate striæ and 1 or 2 elevated undulate and ſomewhat tubercled ridges: *outer-lip* dilated.

395. M. *antiquus*. **Oblong, striate transversely, with the beak elongated: whorls 7 or 8, cylindrical.**

Br. Zool. t. 78. *f.* 98. *Donov. t.* 31. M. deſpectus.

Shell nearly 6 inches long, dull white, thick, strong, red-ſaffron within: *aperture* augular on the fore-part: inner-lip smooth, with an acute entire margin.

396. M. *corneus*. **White, slender, with 8 transversely striate rounded whorls: aperture oblong oval, ending in a deep lengthened canal, tubercled at top.**

Br. Zool. t. 76. *f.* 99. *Donovan t.* 38. *Da Costa t.* 6. *f.* 5.

Shell about 3 inches long, ſometimes covered with a brown skin, tubercled under the canal: *aperture* toothless.

397. M. *Erinaceus*. **Angular, very rugged with small concave scales: aperture oval, ending in a closed tubular canal.**

Br. Zool. t. 76. *f.* 95. *Donov. t.* 35. *Da Costa t* 8. *f.* 7.

Shell nearly 2 inches long, brownish, longitudinally ribbed and tranſverſely striate, imbricate with arched ſcales; the inner-margin toothed: *whorls* warty at the ſutures, carinate between the warts: *aperture* oval, cloſed, with a short beak.

398. M. *purpureus*. **Taper, rugged, ribbed rather obliquely, and crossed by numerous sharp ridges: aperture oval, ending in an open canal.**

Montague Brit. Shells p. 260. *tab.* 9. *f.* 3.

Shell above half an inch long, dark purple with ſometimes a few white Marks, purple within, with about 19 oblique ribs crossed by numerous ridges which give it a tubercled appearance: *aperture* oval: *pillar* obliquely striate: *margin* white, crenate.

399. M. *linearis*. **Taper, rugged, strongly ribbed, crossed by fine spiral thread-like raised ridges: aperture oval, ending in an open canal.**

Montague Brit Shells tab. 9. *f.* 4. *Donov. t.* 179. *f.* 3.

Shell above a quarter of an inch long, light brown, purplish-brown at the ſummits of the ſpiral lines, the apex generally purple: *ribs* 9 or 10: *aperture* oval; margin crenate within; pillar-lip ſmooth.

400. M. *muricatus*. **Taper, rough, tubercled by the strong ribs being crossed by raised striæ: aperture oval, ending in a very long straight canal.**

Montague Brit. Shells p. 262. *tab.* 9. *f.* 2.

Shell half an inch long, white with a flesh-colour or greenish tinge, generally covered with an orange-red skin: *whorls* a little protuberant: *aperture* with the canal longer than the rest of the shell: *outer-lip* sharp, toothed at the edge; margin crenulate within.

401. *Turricula.* Taper, white, ribbed, striate transversely, with the whorls flattened at top: aperture narrow-oblong; the outer-lip angular at top.

Montague Brit. Shells tab. 9. *fig.* 1. *Donovan t.* 156.

Shell 3 quarters of an inch long, white, rather glossy, ending in a fine point, with 7 whorls rising perpendicular over each other; the ribs angular at top: *pillar-lip* ſmooth.

402. M. *rufus.* Taper, pale rufous-brown, with 15 or 16 small ribs, striate transversely: aperture narrow, oblong.

Montague Brit. Shells. p. 263. *n.* 9.

Shell 3 quarters of an inch long, with 6 whorls, ſometimes of a cheſnut colour: *pillar-lip* ſmooth.

403. M. *sinuosus.* Taper, white, or pale with a white band, with 7 strong ribs, striate transversely: aperture oblong-oval, with a deep cavity at the upper-angle of the canal.

Montague Brit. Shells tab. 9. *f.* 8. *Donovan t.* 169. *f.* 2.

Shell 3 quarters of an inch long, thick, with 6 whorls: *outer-lip* thickened by a rib; inner-lip replicated.

404. M. *Bamffius.* Ventricose, white, with 12 or 13 acute longitudinal ribs, not striate transversely: beak a little reflected.

Donovan Brit. Shells v. *tab.* 169. *f.* 1.

Shell above an inch long, whitish, strongly ribbed, but not striate tranſverſely, the first whorl very large: *canal* a little recurved: *aperture* oval.

405. M. *costatus.* Oblong, taper, with 6 whorls and 8 or 9 very obscure longitudinal ribs, not striate transversely: beak a little reflected.

Donovan t. 91. *Da Costa t.* 8. *f.* 14.

Shell not a quarter of an inch long, purplish-brown, chocolate, or yellowish-white, with often deeper tranſverſe bands: *aperture* oblong; the outer-lip thickened: *beak* hardly any.

406. M. *attenuatus.* Slender, tapering to a very fine point, yellowish-white, with 8 whorls and 9 longitudinal ribs: aperture narrow-oblong.

Montague Brit. Shells p. 266. *t.* 9. *f.* 6.

Shell half an inch long, not striate tranſverſely, with the whorls hardly raiſed: *aperture* very narrow, ending in a canal.

407. M. *gracilis.* Slender, yellowish-brown, with 9 or 10 flattish whorls and 13 ribs, striate transversely: aperture oblong-oval.

Montague Brit. Shells. p. 267. *tab.* 15. *f.* 5.

Shell an inch long, with generally a white band round the larger whorl, and purplish brown between the junction of the whorls: outer-lip slightly crenate within.

408. M. *Nebula.* Taper, with 8 ribbed whorls, finely reticulate; the whorls hardly raised above the line of separation: aperture oblong-oval, oblique.

Montague Brit. Shells p. 267. *tab.* 15. *fig.* 6.

Shell about half an inch long, very sharp-pointed, yellowish-white, purplish-brown, pale roſy, or rufous, ſometimes with the reticulations white: *whorls* ſeparated by a fine thread-like line: *aperture* narrow; the canal turning a little to one side; outer-lip sharp.

409. M. *septangularis.* Taper, pale brown, with 7 or 8 strong smooth whorls and 7 longitudinal ribs: aperture oval-oblong.

Montague Brit. shells tab. 9 *f.* 5. *Donov. t.* 179. *f.* 4.

Shell 5 eighths of an inch long, with 7 angular ribs hardly interrupted by the ſeparating line: *outer lip* sharp, contracted to an angle at the upper-part, where the margin is a little indented: *beak* very short.

410. M. *fuscatus.* Taper, yellowish-brown, with 10 or 12 very short, tubercled whorls; the volutions with 3 or 4 crenulate striae between the tubercled spiral ridges.

Lister tab. 121. *f.* 17. *Br. Zool. t.* 82. *f.* 111*?

Shell about an inch and a half long: *aperture* ſmall, oval, ending in a ſmall canal; the baſe ſpirally striate.

411. M. *tubercularis.* Taper, chesnut-brown, with 9 or 10 tubercled whorls separated only by a slight depression: aperture small, oval.

Montague Brit. Shells. p. 270. *n.* 17.

Shell a quarter of an inch long, pointed: *aperture* ſmall, oval, ending in a canal, ſomewhat incloſed by the pillar turning inward.

412. M. *adversus.* Taper, pointed, light-brown, with 10 or 11 reversed tubercled spires: aperture oval.

Donovan t. 159. *Adams Micr. t.* 14. *f.* 12. Turbo.

Shell hardly half an inch long: *whorls* hardly defined by the ſeparating line, with 3 rows of tubercles on each; the middle row ſmaller: *aperture* ending in a slight straight canal; the baſe with 2 or 3 ſpiral ridges.

413. M. *reticulatus.* Taper, rufous brown, with 11 or 12 strongly reticulate whorls: aperture oval, angular at the upper part, contracted into a slight canal at the lower.

Da Costa Brit. Shells p. 117. *tab.* 8. *f.* 13.

Shell above half an inch long, strong, with 4 ſpiral ridges on each whorl crossed by longitudinal rather oblique furrows, with ſometimes a strong rib or two crossing ſome of the whorls: *aperture* contracted into a very slight canal; outer-lip a little indented; baſe not reticulate.

414. M. *minutissimus.* Taper, pellucid, with 5 spirally striate whorls and remote ribs: beak closed.

Adams Linn. Trans. iii. *p.* 65. Minute.

415. M. *contrarius.* With 4 reversed swelling whorls, marked with doubled striae: aperture oval, with a dilated canal.

Lister t. 950. *f.* 44. *b. c.* *Chem. Conch.* 9. *f.* 894. 895.

Shell about 2 inches and a half long, oval, with rounded whorls: *aperture* oval, ending in a dilated straight canal.

Obs. Dr. Lister having marked this ſpecies as British, declaring it to have been found at Harwich by Dr. Dale, there can be no question of the propriety of its place here.

57. TROCHUS. *Top Shell.*

416. Tr. *ziziphinus.* Conic, imperforate at the base spirally striate, the edge of each whorl with a raised smooth margin.

Br. Zool. t. 83. *f.* 103. 104. *Donov. t.* 52. *Da Coſta t.* 3. *f.* 3. 4.

Shell an inch long, nearly as much broad, pointed, with 7 or 8 whorls, livid or pale red varied with darker lines and waves, within irideſcent: *aperture* angular: *baſe* flattish, with circular striæ, without ſpots.

417. Tr. *tenuis.* Conic, imperforate at the base, spirally granulate, not margined at the edge of the whorls.

Montague Brit. Shells. t. 10. *f.* 3. *Donovan t.* 127.

Shell an inch and a quarter long, rather less broad, brown or reddish with deeper marks: *whorls* with ſeveral rows of minute granulations, but without the raiſed ridge at the edge: *base* with ſeveral circles of ſmall reddish ſpots.

418. Tr. *exiguus.* Conic, imperforate at the base, spirally crenate, the edge of each whorl with a raised tubercled margin.

Donovan t. 8. *f.* 2. *Da Dosta t.* 2. *f.* 4. *Lister t.* 616. *f.* 2.

Shell 3 eighths of an inch long, grey-brown or purplish, with the tip crimſon, ſometimes ſpotted with white; within white, not perlaceous: *whorls* 6, with 4 or 5 fine crenulate ridges, and edged with a tubercled wreath reſembling a twissed cord: *baſe* with cicircular ridges.

419. Tr. *striatus.* Conic, imperforate at the base, spirally ridged and finely striate longitudinally, not margined or tubercled at the edge of the whorls.

Lister t. 621. *f*, 8. *Donovan tab.* 155. *f.* 1.

Size of the last, from which it differs in having 6 whorls hardly definable by the line of ſeparation, with 8 or 9 ſpiral ridges on each, crossed by fine longitudinal striæ; in wanting the crimſon tip, and large ſpiral rib at the end of each whorl, in being marked by longitudinal reddish lines, and perlaceous within.

420. Tr. *tumidus.* Subconic, tumid, slightly perforated at the base, with 5 projecting whorls very finely and spirally striate, the larger-one with a subcarinate edge at the bottom.

Montague Brit. Shells p. 280. *tab.* 10. *f.* 4.

Shell a quarter of an inch long, strong, pointed but not taper, grey or yellowish-brown, or dark purplish-brown with obſcure undulations, within perlaceous: *baſe* rounded, with a ſmall perforation which is almost cloſed by age.

421. Tr. *crassus.* Subconic, rarely perforated at the base, with 5 rounded smooth whorls, grey-brown with numerous zigzag purplish-brown lines: outer-lip with a tooth-like protuberance at bottom.

Donov. t. 71. *Da Costa t.* 6. *f.* 7. Tr. lineatus.

Shell strong, coarse, top-shaped, perlaceous when the outer-coat is off: *whorls* rounded, separated by a depressed line, marked with close-set zigzag purplish-brown or black lines: *pillar-lip* smooth white, not pearly; the white part extending almost acroſs the base, and flattened as if worn.

422. Tr. *Magus.* Subconic, perforated at the base, with 5 or 6 tumid whorls, finely striate, the ridges of each rising into obtuse tubercles.

Br. Zool. t. 80. *f.* 107. *Donov. t.* 8. *f.* 1. *Da Costa t.* 3. *f.* 1.

Shell 3 quarters of an inch long, about an inch wide, white or rosy with undulate crimson or purplish stripes blotches or spots: *whorls* marked by a deep separating line, ending in a point: *base* spotted, with a large perforation.

423. Tr. *cinerarius* Conic, produced at the point, with a small perforation at the base: whorls 5, cinereous with fine approximate oblique brown or purplish lines.

Donovan. t. 74. two upper and lower fig. *Da Costa t.* 3. *f.* 11. 12.

Shell five eighths of an inch long, as much broad, rather oblique; the whorls a little rounded and ſeparated by a fine line.

424. Tr. *umbilicatus.* Flattish, rounded and depressed at top, with a large perforation at the base: whorls 5, white or greenish with purple waved or zigzag lines.

Donovan t. 74. three middle fig. *Br. Zool. t.* 80. *f.* 106.

Shell 5 eighths of an inch high, 3 quarters broad, marked with nearly obſolete ſpiral striæ, more flattened than the last, and the aperture reaches to the tip.

425. Tr. *terrestris.* Conic, perforated at the base, livid-white, finely striate longitudinally: base flat, with a strong carinate edge round it.

Br. Zool. t. 80. *fig.* 108. *Donov. tab.* 111.

Shell not a quarter of an inch high, rather more broad, with sometimes a brown line round the middle of the whorls: *whorls* divided by a fine depressed line, and a prominent ridge at the base of each: *base* striate from the centre.

426. Tr. *fuscus.* Brown, opake, margined, perforated, with 5 whorls and roundish aperture.

Walk. min. Shells f. 58. *Adams Micr. t.* 14. *f.* 24. Minute.

427. Tr. *cinereus.* Obtusely conic, perforated at the base, grey with narrow blackish lines: pillar-lip with 2 slight teeth and 2 transverse furrows.

Donovan t. 155. *f.* 2. *Da Costa tab.* 3. *f.* 5.

Shell size of a cherry, thick, strong, greenish-pearly about the perforation, with 5 whorls faintly striate circularly. It is probably a variety of Tr. cinerarius, or a foreign shell.

58. TURBO. *Wreath Shell.*

A. *Marine, with regular wreaths.*

428. T. *Terebra.* Taper, pointed, with 12-16 whorls marked with numerous fine spiral striæ, some of which are prominent and acute.

Br. Zool. t. 81. *f.* 113. *Donov. t.* 22, *f.* 2. *Da Costa t.* 7. *f.* 5. 6.

Shell about an inch and a half long, with 5-9 rather prominent ridges on each whorl, whitish or cream-colour, with brown red or orange marks.

429. T. *exoletus.* Taper, with 12-14 whorls obscurely striate, each with 2 prominent obtuse spiral ridges in the middle.

Donovan tab. 22. *f.* 1. *Da Costa tab.* 7. *f.* 8.

Shell 2 inches and a half long, white or purplish, variegated with chesnut; the whorls separated by a deep depression.

430. T. *Clathrus.* Taper, with 9-12 swelling whorls, and as many distant strong rather oblique longitudinal ribs.

Br. Zool. t. 81. *f.* 111. 111. *A. Donov. t.* 28. *Da Costa t.* 7. *f.* 11.
Shell an inch and a half long, whitish, ſometimes mixed with brown or ferruginous: *whorls* rounded, ſeparated by a deep groove: *aperture* margined.

431. T. *Clathratulus*. Taper, with 5 or 6 whorls and about 15 approximate longitudinal ribs.
Adams Microsc. t. 14. *f.* 19. *Walk. min. Shells f.* 45.
Shell minute, white, opake, reſembling the last, except in size, number of whorls and diſpoſition of the ribs: *aperture* margined.

432. T. *nitidissimus*. Taper, acute, pellucid-white, with 9 smooth much raised and rounded whorls.
Montague Br. Shells p. 299. *tab.* 12. *f.* 1.
Shell one tenth of an inch long, very slender, with the whorls much ſwollen and ſeparated by a deep depression.

433. T. *unicus*. Taper, acute, pellucid white, with 9 rounded and raised whorls finely striate longitudinally.
Montague t. 12. *f.* 2. *Walker f.* 40. *Adams t.* 14. *f.* 7.
Shell 2 tenths of an inch long, with the striæ ſomewhat undulate, the intermediate ſpaces with extremely fine tranſverſe ones: *aperture* inclining to oval.

434. T. *duplicatus*. Taper whitish, with 14 or 15 whorls each marked with 2 prominent acute transverse ridges.
Br. Zool. t. 81. *f.* 112. *Donovan t.* 112. *Da Costa t.* 6. *f.* 3.
Shell 2 inches and a half long, finely striate acroſs between the ribs: *aperture* ſuboval.

435. T. *subtruncatus*. Tapering to an obtuse point, pellucid yellowish-white, with 6 or 7 swollen smooth whorls.
Montague Br. Shells p. 300. *tab.* 10. *f.* 1.
Shell 2 tenths of an inch long, ſometimes with a few faint longitudinal striæ: *aperture* inclining to oval.

436. T. *truncatus*. Cylindrical, glossy, pellucid, horn-colour, with 4 smooth swollen whorls, abrupt as if truncate at the point.
Montague Brit. Shells p. 300. *tab.* 10. *f.* 7.
Shell 2 tenths of an inch long, rarely with a few longitudinal striæ, or crenulate in the ſutures: *whorls* ſeparated by a deep line: *aperture* slightly margined, ſuborbicular.

437. T. *littoreus*. Suboval, pointed, spirally striate; the first whorl very large; outer-lip thin and spreading.
Perriwinkle. *Br. Zool. t.* 81. *f.* 109. *Donovan t.* 33. *f.* 1. 2.
Shell about an inch long, with about 5 whorls ſeparated by a fine line, various shades of red brown or yellow, plain or ſpirally banded with various colours: *aperture* ſuborbicular,

438. T. *jugosus*. Suboval, tumid, with 4 spirally grooved whorls; the first very large: outer-lip thin, slightly crenate.
Montague Suppl. t. 20. *f.* 2. *L. Trans.* viii. *t.* 4. *f.* 7.
Shell 3 eighths of an inch long, not much pointed, dull yellow or fulvous, with ſometimes a greenish or purple cast, with white grooves: *pillar* broad, ſmooth.

439. T. *tenebrosus*, Subconic, rather obtuse, dark choco-

late brown, with 5 striate whorls, the first very much inflated.

Montague Br. Shells. Supplem. t. 20. *f.* 4.

Shell a quarter of an inch wide, dark chocolate brown, within dark purplish brown: *whorls* tumid, the first occupying half the shell: *lips* thin.

440. T. *petræus.* Conic, acute, purplish-brown, with 5 faintly and irregularly wrinkled whorls: aperture pear-shaped.

Montague Brit, Shells p. 403. Helix petræa,

Shell above a quarter of an inch long, within deep glossy purple; the first whorl very much ſwollen and occupying two-thirds of the shell. It is ſometimes variegated with white or rufous.

441. T. *Ziczac.* Subconic, rather acute, slightly striate, blueish, with 5 or 6 whorls; the larger-one carinate at the base.

Linn. Transact. viii. *p.* 160. *tab.* 4. *f.* 14.

Shell a quarter of an inch long, white towards the lip: *aperture* suborbicular, contracted towards the tip.

442. T. *rudis.* Suboval, smooth or faintly striate, with 5 distinct tumid whorls: lip thick, glossy within.

Donovan t. 33. *f.* 3. *Linn. Trans.* viii. *p.* 159. *t.* 4. *f.* 12. 13.

Shell about 3 quarters of an inch long, dirty yellow or brown, reſembling the last, but the whorls are ſeparated by a deep line: *aperture* nearly orbicular.

443. T. *mammillatus.* Suboval, striate with raised dots, and slightly angular by a few of the striae, the dots of which are larger.

Donovan Brit. Shells v. *tab.* 173.

Shell hardly an inch long, yellowish-white, with ſometimes a deep band or two, elegantly striate and marked with raiſed dots: *aperture* orbicular.

444. T. *striatulus.* Suboval, slightly cancelled; the whorls striate on the upper-part, and marked with 3 raised membranaceous ridges on the lower.

Da Costa t. 8. *f.* 10. *Montague t.* 10. *f.* 5.

Shell hardly a quarter of an inch long, white, with 4 or 5 whorls, each ending in a flat top, striate longitudinally: *aperture* ſuborbicular, angular at the upper-part,

445. T. *vinctus.* Conic, smooth, subpellucid, rufous horn-colour with purplish-brown or chesnut bands: whorls 6, rounded.

Montague Brit, Shells p. 307. *n.* 14.

Shell about 3 eighths of an inch long, ſometimes light horn-colour with faint bands, ſometimes plain; the lower-whorl with commonly 4 or 5 bands, the 2 next with each two: *tip* ſmall, not pointed: *inner-lip* thick, white, ending in a narrow channel.

446. T. *auricularis.* Conic, smooth, subpellucid, light horn-colour, with 5 much rounded whorls: lip much reflected, forming an angle about the middle.

Montague Brit. Shells p, 308, *n.* 15,

Shell 3 eighths of an inch long, rather pointed, the whorls divided by a deep line: *aperture* ſuboval, or ear-shaped: *inner-lip* much reflected, with a narrow channel behind the angle,

447. T. *crassior.* Conic, thick, pointed, yellowish-white, with 5 rounded whorls: pillar-lip wrinkled, *Walker min. Shells f.* 24. *Montague p.* 309.

Shell half an inch long, often covered with a thin yellowish-brown skin, beneath which are a few obscure striae on the larger whorl: *lip* and inside white.

447. T. *pallidus*. Conic, thick, pale, with 5 rounded slightly bicarinate whorls: pillar smooth.

Donovan Brit. Shells. v. *tab.* 178. *f.* 4.

Shell half an inch long, with the lower-whorl swelling; *aperture* suboval, margined.

448. T. *parvus*. Conic, strong, with 5 or 6 rounded coarsely ribbed whorls.

Donov. t. 90. *Linn. Tr. t.* 13. *f.* 29. 30. *f.* 15. 16. *var.*

Shell about an eighth of an inch long; white, cheſnut, or pale rufous, often variegated, sometimes ribbed on the lower whorl only, sometimes worn smooth: *aperture* suborbicular.

449. T. *costatus*. Glossy-white, with 4 or 5 much raised whorls with strong longitudinal ribs and fine transverse striæ: lip bordered by a prominent grooved rim.

Montague t. 10. *f.* 6. *Linn. Trans.* iii *t.* 13 *f.* 13. 14.

Shell about the eighth of an inch long, rather obtuse; *aperture* suborbicular with a ridge at the upper angle running, transversely backward: *lip* bordered by a strong prominent grooved rim, striate in the depression.

450. T. *striatus*. Pellucid, glossy-white, with 6 rather rounded whorls transversely striate and faintly ribbed on the upper-part: aperture suboval, margined.

Linn. Trans. iii. *t.* 13. *f.* 25. 26. *Walk. min. Shells. f.* 49.

Shell about an eighth of an inch long, sometimes covered with a brown skin, rather pointed, finely and regularly striate across: *lip* hardly acute.

451. T. *Bryereus*. Conic, strong, glossy-white, with 7 smooth finely ribbed whorls: pillar-lip smooth.

Montague Brit. Shells tab. 15. *f.* 8. *Donovan t.* 178. *f.* 3.

Shell nearly a quarter of an inch long, resembling T. costatus, but is double the size, has more numerous and finer ribs, and is without the transverse striae: *lip* not margined.

452. T. *coniferus*. Taper, white, rather obtuse: whorls 6, with about 12 strong undulate ribs, somewhat papillous at the line of separation.

Montague Brit. Shell. p. 314. *tab.* 15. *f.* 2.

Shell a quarter of an inch long, thick, with about 12 undulate ribs, the tops of which at the sutures have the interſtices formed into ſmall cavities giving them a warty appearance, very finely striate acroſs: *aperture* oval, oblique, strongly margined.

453. T. *denticulatus*. Conic, white, obtuse; whorls 6, with 9 or 10 oblique ribs denticulate at the line of separation.

Montague Brit. Shells. p. 315. *n.* 23.

Shell a quarter of an inch long, ſubpellucid, reſembling the last, but has only 9 or 10 ribs not undulate nor striate between them: *aperture* ſuborbicular, not margined, but thickened at the rib.

454. T. *Cimex*. Oblong-oval; white, strongly decussate, forming the interstices into raised dots.

Donovan t. 2. *f.* 1. *Da Costa t.* 8. *f.* 6. 9.

Shell an eighth of an inch long, thick, rather obtuſe, with 4 strongly cancelled whorls : *aperture* ſuboval, with a thick margin ; the outer-lip crenate within.

455. T. *ventrosus*. Conic, smooth, thin, horn-colour, with 6 much rounded whorls : aperture suboval, with an entire margin.

Montague Brit. Shells. p. 317. *tab.* 12. *f.* 13.

Shell an eighth of an inch long, pale horn-colour, pellucid, rather pointed : *aperture* orbicular-oval.

456. T. *Ulvæ*. Conic, pointed, thick, rufous-brown, with 6 or 7 hardly raised whorls : aperture suboval, with a slight depression behind.

Br. Zool. t. 86. *f.* 120. *Montague p.* 318,

Shell about a quarter of an inch long, opake, with the whorls ſeparated by a ſmall line : *inner-lip* reflected, forming a ſmall depression behind.

457. T. *subumbilicatus*. Conic, smooth, rather obtuse, yellowish-white, with 4 or 5 very tumid whorls : aperture exactly oval, with a slight umbilicus.

Montague p. 316. *Pultn. Dorset. t.* 18. *f.* 12. *b.*

Shell an eighth of an inch long, differing from the two laſt in having the aperture exactly oval, from T. ulvæ in having the whorls very much ſwollen, and from T. ventrosus in having the inner-lip a little reflected and forming a slight umbilicus or groove.

458. T. *Pullus*. Oval, smooth, with 4 or 5 much rounded whorls : aperture large, suborbicular, a little produced on the fore part.

Donovan t. 2. *f.* 2-6. *Da Costa t.* 8. *f.* 1-3.

Shell 3 eighths of an inch long, glossy, white with red or purplish marks variously diſpoſed in bands ſpots or lines ; the first whorl very large.

459. T. *ruber*. Conic, smooth, pointed, reddish-brown, with 5 rounded whorls : aperture suborbicular, a little reflected on the pillar.

Adams Linn. Trans. 3. *tab.* 13. *f.* 21. 22.

2. White, perfectly tranſparent. *Montague p.* 321.

Shell an eighth of an inch long or rather more, with rounded whorls divided by a fine ſeparating line.

460. T. *reticulatus*. Conic, pointed, light-brown, with 6 much raised strongly reticulate whorls : pillar subumbilicate.

Adams Linn. Trans. 3. *p.* 66. *tab.* 13. *f.* 19. 20

Shell the tenth of an inch long, whitish-brown, opake : *aperture* suborbicular, margined : *inner-lip* ſpreading on the pillar, forming a groove or slight umbilicus.

461. T. *semicostatus*. Conic, short, white, with 4 or 5 rounded whorls, the largest of which is faintly ribbed and obscurely striate transversely.

Montague p. 326. *Suppl. tab.* 21. *f.* 5.

Shell half a line long, obtusely pointed, with the ribs not extending to the lower part of the whorl where the transverse striae commence : *aperture* suborbicular : *pillar-lip* a little reflected ; pillar smooth

462. T. *unifasciatus*. Conic, short, smooth, with 5 flattish whorls, the larger of which are marked with a purplish-brown band or two.

Montague Suppl. t. 20. *f.* 6. *L. Trans.* 5. *t.* 1. *f.* 13. 14.

Shell an eighth of an inch long, with the bands near the junctions of the whorls, seldom extending to the third: *aperture* suboval; inner-lip spreading, imperforate.

463. T. *nivosus.* Rather slender and obtuse, smooth, white, with 5 or 6 much rounded whorls: inner-lip and pillar quite smooth and even.

Montague Brit. Shells. p. 326. *n.* 39.

Shell about a line long, gloſsy, with a suboval aperture: resembles Voluta interstincta, but is without the tooth and the ribs.

464. T. *labiosus.* Subconic, pointed, pale horn-colour, with 7 or 8 flattish whorls; the 3 larger ones with 15 or 16 obscure ribs.

Montague Brit. Shells. t. 13. *f.* 7. Helix labiosa.

Shell about a quarter of an inch long, ſubpellucid, with frequently a purplish tip, within white: *aperture* oval: *outer-lip* thin, slightly reflected, generally purplish-brown, a little gibbous on the back: *pillar* undulate within, forming a ſmall tooth-like elevation.

465. T. *Cingillus.* Conic, with 6 flat whorls marked with alternate bands of horn-colour and chesnut-brown, obscurely striate.

Montague t. 12. *f.* 7. *Donovan t.* 178. *f*, 1. T. vittatus,

Shell above the eighth of an inch long, ſubpellucid, pale brown at the tip, with generally 3 cheſnut bands on the larger whorl, not visibly striate in the older ones: *aperture* ſuboval, contracted at the upper-part: *outer-lip* thin, not turning outwards: *inner-lip* a little thickened.

466. T. *quadrifasciatus.* Subconic, smooth, white, with mostly 4 faint brown bands: whorls 4, the first very large and slightly carinate.

Montague p. 328. *Supplem. tab.* 20. *f.* 7.

Shell hardly a quarter of an inch long, ſometimes plain white, ſometimes with two of the bands on the ſecond whorl, ſometimes with the bands united and forming 2 broad ones: *aperture* ſuborbicular: *lip* thick, with an acute margin: *pillar* broad, sinuate, umbilicate. Reſembles Helix canalis, but is thicker and more opake, has an angular appearance at the baſe of the larger whorl, and the outer-lip is thick.

467. T. *interruptus.* Subconic, pellucid, smooth, with 5 slightly raised whorls, white with longitudinal interrupted ochraceous streaks.

Montague Supplem. t. 20. *f.* 8. *Donovan t.* 178. *f.* 2.

Shell the eighth of an inch long, rather pointed, pale horny or white: *aperture* ſuborbicular: *inner-lip* reflected,

468. T. *retiformis.* White, opake, with 4 tumid reticulate whorls: aperture suboval.

Walker minute Shells f. 37. Minute.

469. T. *strigatus.* White, opake, with 3 whorls; the first with 3 transverse ridges: aperture suboval.

Walker minute Shell. f. 38. Minute,

470. T. *carinatulus.* White, opake, taper, carinate, with 7 whorls, and contracted margined aperture.

Adams Microsc. t. 14. *f.* 18. *Walk. min. Shells f.* 44.

471. T. *Sandvicensis.* White, pellucid, with 3 reticulate whorls, and oval 1-toothed aperture.

Adams Microsc. t. 14, *f.* 23. *Walker f.* 55.

472. T. *fulgidus.* Subconic, pellucid, smooth, with 3 whorls, the first very large, variegated white and bronze.

Montague p. 322. *Adams Linn. Trans.* iv. *p.* 531.

Shell half a line long, glossy, variegated white and bronze, uſually in bands, with a ſmall obtuſe point: *aperture* ſuborbicular, with a thin margin.

473. T. *albulus.* Opake, with 5 longitudinally ribbed whorls: aperture roundish not margined.

Adams Linn. Trans. 111. *p.* 66. *tab.* 13. *f.* 17. 18.

474. T. *scriptus.* Smooth, opake, with 3 whorls marked with brown lines resembling characters: aperture roundish.

Adams Linn. Trans. 111. *p.* 65. *tab.* 13. *f.* 11. 12.

The lines exactly reſemble thoſe on the *Lichen scriptus.*

475. T. *subarcuatus.* White, pellucid, a little curved towards the tip, with 10 longitudinally ribbed whorls.

Adams Linn. Trans. 111. *p.* 66. *tab.* 13. *f.* 27. 28.

476. T. *Adamsii.* Pellucid, with 6 spirally striate whorls remotely ribbed: aperture oval.

Adams Linn. Trans. 111. *t.* 13. *f.* 31. 32. T. elegans.

477. T. *divisus.* White, pellucid, with 4 whorls, the upper-half of each smooth, the lower-half spirally striate: aperture suboval.

Adams Linn. Trans. iii. *p.* 254.

478. T. *subrufus.* Smooth, opake, with 5 whorls somewhat angular above, dull red, with a white transverse band on the upper-part of each whorl.

Adams Linn. Trans. v. *p.* 3. *tab.* 1. *f.* 18. 19.

B. *Land and fresh water, with regular wreaths.*

479. T. *Muscorum.* Oval, obtuse, smooth, yellowish-brown, with 6 whorls: aperture margined, toothless.

2. Pillar-lip with a single tooth.
3. Half the size, toothleſs: aperture not margined.

Donovan t. 80. *Da Costa p.* 89. *t.* 5. *f.* 16.

Shell above the eighth of an inch long, pellucid, brown when filled with the inhabitant: *aperture* ſuborbicular, with a white margin a little reflected, forming a depression.

480. T. *sexdentatus.* Oval, obtuse, smooth, brown-horny, with 5 rather rounded whorls: aperture 6-toothed.

Montague Brit. Shells p. 337. *t.* 12. *f.* 8.

Shell a line long: *aperture* ſubangular, with mostly 4 teeth on the outer lip and 2 on the inner: the young shells have only 4 teeth.

481. T. *tridens.* Subcylindrical, smooth, obtuse, light brown, with 6 or 7 hardly raised whorls: aperture 3-toothed.

Montague Brit. Shells p. 338, *tab.* 11. *f.* 2.

Shell a quarter of an inch long, pellucid, with a single tooth on the margin and 2 near the baſe of the pillar, and ſometimes 2 ſmaller alternate ones: *aperture* ſmall, curved.

482. T. *Carychium.* Subconic, white, pellucid, obtuse, faintly striate longitudinally, with 5 rounded whorls: aperture with 2 teeth and the rudiment of a third.

Montague Brit. Shells Suppl. t. 22. *f.* 2.

Shell hardly a line long : *aperture* ſuboval, contracted, margined ; *outer-lip* thickened inwards in the middle by a knob : *pillar-lip* with 2 teeth, and generally the rudiment of a third above the other.

483. T. *Juniperi*. Subcylindrical, obtuse, opake, brown, with 8 or 9 obliquely striate whorls: aperture 7-toothed.

Montague Brit. Shells p, 340, *tab.* 12, *f.* 12.

Shell above a quarter of an inch long, with the whorls slightly raiſed : *aperture* ſuborbicular, margined, reflected, white, with 3 ridge-like teeth on the outer-lip, and 4 on the pillar : behind the pillar lip at the baſe is a large cavity.

484. T. *elegans*. Suboval, grey with a purple tinge: whorls 5, tumid, strongly striate spirally and crossed with faint longitudinal-ones.

Br. Zool. t. 82. *f.* 110. *Donovan t.* 59. *Da Costa t.* 5. *f.* 9.

Shell 5 eighths of an inch long, ſometimes marked with interrupted bands or longitudinal streaks of purplish-brown, often purple at the tip which is rather obtuſe : *aperture* orbicular, slightly reflected, the margin faintly striate, covered with a horny ſpirally striate lid : *pillar-lip* with an obſolete cavity behind it.

485. T. *fontinalis*. Subconic, thin, horn-colour, umbilicate, with 4 or 5 much rounded smooth or very finely wrinkled whorls.

Donov. t. 102. *Montague Suppl. t.* 22. *f.* 4.

Shell about a quarter of an inch long, ſubpellucid, with very protuberant whorls, very minutely striate longitudinally, rather obtuſe : *aperture* quite orbicular : *pillar* with a ſmall perforation.

486. T. *nautileus*. Pellucid, light horn-colour, with 3 or 4 whorls hardly rising one above the other, annulate across, and crested on the back.

Linn. Transact. viii. *p.* 169. *tab.* 5. *f.* 4.

Shell the eighth of an inch wide, generally covered with a brown skin, furnished with distant raised annulations, which rise on the back into short crests or spines, flat and umbilicate underneath : *aperture* truncate, orbicular.

487. T. *cristatus*. Subpellucid, pale horny, flattish above, umbilicate underneath, with 3 or 4 cylindrical whorls.

Walker Minute Shells f. 18.

Shell the tenth of an inch wide, flat at top, with the whorls very faintly striate : *aperture* circular.

488. T. *depressus*. Subpellucid, slightly rugged, pale horn-colour, umbilicate underneath, with 4 whorls: aperture circular.

Montague Brit, Shells p. 439. *t.* 13 *f.* 5. Helix.

Reſembles the last but is less, more solid and opake, and is without ſpire : *tip* more prominent.

489. T. *fuscus*. Brown, opake, with 5 striate whorls, and suboval aperture.

Walker minute Shells f. 42. Minute.

490. T. *Rivulus*. White, opake, with 4 striate whorls, and an oval margined aperture.

Walker minute Shells f. 57. Minute.

C. *With the whorls turning in a contrary direction.*

491. T. *bidens.* Taper, smooth, brown, pellucid, with 10 or 11 whorls slightly crenate in the suture: aperture 2-toothed behind.

Linnean Tranſactions viii. *p.* 178. *tab.* 5. *f.* 3.

Shell about half an inch long, armed with white minute papillæ or denticulations at the juncture of the whorls.

492. T. *laminatus.* Taper, smooth, rufous horn-colour, pellucid, with 10 rather raised whorls: aperture attached to the whorl, 2-toothed behind.

Montague Br. Shells p. 359. *tab.* 11. *f.* 4.

Shell 3 quarters of an inch long: *aperture* suborbicular, contracted and joined to the body whorl; lip white, slightly margined and reflected; pillar not detached from the larger-whorl, furnished with 2 white tooth-like folds.

493. T. *biplicatus.* Taper, opake, brown, longitudinally striate, with 12 or 13 whorls: aperture slightly detached from the whorl, 2-toothed behind.

Montague Brit. Shells p. 361. *tab.* 11. *f.* 5.

Shell the size of the last, from which it differs in being strongly striate longitudinally, and in having the angle of the aperture not joining the larger whorl.

494. T. *nigricans.* Taper, opake, blackish, minutely striate, with 11 or 12 whorls: aperture with 2 rather remote teeth behind.

Donovan t. 72. *Br. Zool. t.* 82. *f.* 116. T. perverſus.

Shell about half an inch long, reſembling the 2 last, but is less, of a blackish-brown colour, is very finely striate, and the teeth are not contiguous.

495. T. *labiatus.* Taper, opake, light brown, longitudinally striate: aperture 2-toothed, with a dilated thick white margin.

Montague t. 11. *f.* 6. *Da Costa tab.* 5. *f.* 15.

Shell 5 eighths of an inch long, with numerous strong regular striæ: *whorls* 9, flat, ſeparated by a fine obſcure line: *aperture* ſuborbicular, with a sinus at the upper end, and furnished with 2 tooth-like laminæ; *pillar* a little detached from the larger whorl.

496. T. *perversus.* Taper, pellucid, yellowish-horny, obscurely striate, with 8 or 9 slightly rounded whorls: aperture toothless.

Montague t. 11. *f.* 12. *Linn. Tr.* viii. *t.* 5. *f.* 2.

Shell a quarter of an inch long, rather obtuſe: *aperture* ſuborbicular, with an obſcure knob in the older ones: *pillar* not detached; the edges thin, white.

497. T. *Vertigo.* Oval, opake, brown, obtuse, with 5 faintly striate whorls: aperture somewhat triangular, toothed.

Montague Brit. Shells. p. 363. *tab.* 12. *f.* 6.

Shell hardly a line long, generally with 3 teeth, one on the lip, and two on the pillar, with a protuberance at the angle of the lip; ſometimes with 6 teeth, and even with the rudiments of a ſeventh: *aperture* slightly margined, indented.

59. HELIX. *Snail-Shell.*

A. *Whorls carinate, with an acute edge.*

498. H. *Lapicida.* Pale brown, with transverse darker marks, umbilicate, convex on each side: aperture margined, transverse, oval.

Br. Zool. t. 83. *f.* 121. *Donovan tab.* 39. *f.* 2.

Shell 3 quarters of an inch wide, 3 eighths high, subpellucid, compreſsed dark horny with ferruginous blotches, very finely striate and minutely roughened like shagreen: *aperture* suboval, transverse, very slightly dilated, with an acute white margin; outer-lip reflected; inner-lip ſpread.

499. H. *subcarinata.* White, rather convex, umbilicate, finely striate across, with 3 fine raised lines on the larger whorl.

Montague Brit. Shells. p. 438. *tab.* 7. *f.* 9.

Shell the tenth of an inch wide, more than half as much high, subopake, with 2 ridges round the base of the larger whorl, and one on the upper-part, which continues round the middle of the second whorl, finely striate across between the raised lines: *aperture* oval; outer-lip projecting; inner reflected, and spreading into a sharp angle.

500. H. *Planorbis.* Pale chesnut, flat, concave above, slightly carinate, umbilicate: aperture obliquely oval, rather acute at both ends.

Linn. Trans. viii. *t.* 5. *f.* 13. *Br. Zool. t.* 83. *f.* 123.

Shell about 5 eighths of an inch wide, pale and pellucid when empty, blackish when filled with the inhabitant, of 4 finely striate whorls which have a prominent margin at the base.

501. H. *planata.* Pale chesnut, flat, carinate in the middle of the whorls: aperture suboval, rather acute at one end.

Linn. Trans. viii. *t.* 5. *f.* 14. *Montague Supl. t.* 25. *f.* 1.

Shell half an inch wide, resembling the last, but the margin of the whorls is placed in the middle, and the aperture is acute at one end only.

502. H. *Vortex.* Horn-colour, concave above, with about 6 whorls, carinate at the base: aperture oval, flat, acute.

Br. Zool. t. 83. *f.* 124. *Donovan. t.* 75. *Da Costa t.* 4. *f.* 12.

Shell hardly half an inch wide, sometimes covered with a greenish or rufous brown skin: *whorls* 6 or 7, flat and not umbilicate underneath: *aperture* compressed, a little angular, with an acute margin.

B. *With rounded whorls, umbilicate.*

503. H. *cornea.* Rufous horn-colour, flat, umbilicate above, with 4 cylindrical whorls.

Br. Zool. t. 83. *f.* 126. *Donov. t.* 39. *f.* 1. *Da Costa t.* 4. *f.* 23.

Shell about an inch wide, subpellucid, grey when young, *Br. Zool. f.* 125. minutely striate longitudinally and acroſs, concave at top: *aperture* rather lunate, with a thin margin a little oblique downwards.

504. H. *Spirorbis.* Horn-colour, flat, concave on both sides, with 5 or 6 cylindrical whorls.

Montague Brit. Shells p. 455. *Suppl. t.* 25. *f.* 2.

Shell 3 tenths of an inch wide, pellucid, yellowiſh-horny, equal and concave on both ſides : *aperture* oval.

505. H. *contorta*. Cheſnut, flat, equal both ſides, ſlightly umbilicate : aperture linear-lunate, acute at the ends.

Donovan t. 99. *Da Coſta t.* 4. *f.* 11.

Shell 2 tenths of an inch wide, horn-colour or rufous, with 5 or 6 whorls concave each ſide : *aperture* reſembling the moon in its firſt quarter.

506. H. *alba*. Pale horn-colour, flattiſh, finely ſtriate, umbilicate both ſides : aperture dilated lunate.

Montague Brit. ſhells p. 459. *Suppl. t.* 25. *f.* 7.

Shell a quarter of an inch long, pellucid, covered with a brown ſkin, above flattiſh beneath convex : *whorls* 4, cylindrical, minutely ſtriate longitudinally and acroſs.

507. H. *fontana*. Horn-colour, flat, obtuſely carinate, umbilicate at the baſe, with 3 whorls convex on both ſides : aperture ſemiovate.

Montague Brit. Shells. p. 462. *tab.* 6. *f.* 6.

Shell hardly 2 tenths of an inch wide, perfectly ſmooth, reſembling the Nautilus lacuſtris, but is leſs convex on the upper-ſide, and is without the partitions within : *aperture* half oval, pointed at top, dilated towards its connection with the ſhell.

508. H. *paludoſa*. White, ſmooth, flat, umbilicate, a little convex above : aperture nearly orbicular, with a thick reflected margin.

Linn. Tranſact. viii. *p,* 193. *tab.* 4. *f.* 5.

2. With the whorls ſtriate or membranaceouſly annulate.

Lightfoot Philoſ. Tranſ. 76. *t.* 3. *f.* 1-4. Turbo.

Shell a tenth of an inch wide, with 4 whorls, ſubpellucid, with a clear white opake margin to the aperture.

509. H. *Ericetorum*. Flat, whitiſh with a brown ſpiral band or bands, and very large perforation.

Br. Zool. t. 85. *f.* 122. *Donov. t.* 151. *f.* 2. *Da Coſta t.* 4. *f.* 8.

Shell 3 quarters of an inch broad, one quarter high, white or yellowiſh white, with ſometimes ſeveral bands on the large whorl : *aperture* ſuborbicular, with a thin margin hardly reflected.

510. H. *cingenda*. Yellowiſh-white with brown ſpiral bands, with a convex obtuſe ſpire, ſlightly umbilicate : aperture ſuborbicular.

Br. Zool. t. 85. *f.* 133. *Montague Suppl. t.* 24. *f.* 4.

Shell 3 quarters of an inch wide, half an inch high, ſmooth, with 5 whorls, the larger-ones a little flattened at top ; the upper-part with broad bands, and numerous darker interrupted ones ; beneath with a ſingle ciliate band ; *whorls* a little raiſed, finely reticulate, dark chocolate-brown at top : *aperture* with a thin margin.

511. H. *virgata*. White with a purpliſh brown band, convex : aperture ſuborbicular, with a fine white raiſed line round the margin within.

Br. Zool. t. 85. *f.* 133, A. *Donovan t.* 65. *Da Coſta t.* 4. *f.* 7.

Shell half an inch wide, with a ſingle ſpiral band from the baſe to the tip, and ſeveral circular lines of the ſame colour round the baſe, within pale purpliſh-brown with a white raiſed thread-like line round the margin ; ſometimes rufous or pale with a white band : *perforation* narrow, deep.

512. H. *caperata*. White with purpliſh-brown bands,

tipt with black, striate longitudinally, slightly carinate and depressed.

Montague Brit. Shells p. 430. tab. 11. f. 11.

Shell nearly half an inch wide, a quarter high, regularly striate longitudinally, with a purplish-brown band above, often interrupted with white, beneath with lines of the ſame colour; ſometimes dark-brown or grey with a white belt and ſpots: *aperture* lunate, with a thin lip.

513. H. *rufescens*. Rufous-brown, slightly wrinkled, somewhat carinate and depressed: aperture semilunar.

Br. Zool. t. 85. f. 127. Donovan t. 157. f. 1. Da Costa t. 4. f. 6.

Shell half an inch wide, with numerous longitudinal striæ or obſcure wrinkles, with 4 or 5 whorls, the first with an obſcure paler ridge: *outer-lip* thin, a little reflected at the lower angle: *perforation* large, very deep.

514. H. *Cantiana.* Pale rufous with a blueish tinge, slightly striate and depressed: aperture suborbicular.

Donovan t. 157. f. 2. Montague Suppl. tab. 23. f. 1.

Shell 3 quarters of an inch wide, reſembling the last, but differs in colour and size, in wanting the slight keel on the back of the first whorl, in the place of which is frequently a pale band, in having a ſmaller perforation, and in being obſcurely striate.

515. H. *nitens*. Fulvous horn-colour, pellucid, slightly striate, depressed: aperture large, lunate.

Linn. Trans. viii. *t. 5. f. 7. Montague Suppl. t. 23. f. 4.*

Shell nearly half an inch wide, thin, brittle, glossy, whitish or greenish at the baſe: *aperture* with a thin margin, not reflected: *perforation* deep.

516. H. *radiata*. Pale horn-colour, with transverse chesnut rays, slightly carinate and depressed, closely striate, convex beneath.

Montague Suppl. t. 24. f. 3. Da Costa t. 4. f. 15. 16.

Shell a quarter of an inch wide, thickly ſet with dark brown waves or rays: *aperture* lunate; *perforation* deep.

517. H. *hispida*. Light horn-colour, diaphanous, clothed with thick-set whitish hairs, convex: aperture roundish-lunate.

Donov. t. 151. f. 1. Da Costa t. 5. f. 10.

Shell about a quarter of an inch wide, with 5 rounded whorls, clothed with short stiff hairs, finely striate acroſs: *lip* thin, slightly reflected at the angle near the perforation.

518. H. *umbilicata*. Dark horny-brown, subconic, finely striate across, with 5 rounded whorls: perforation large and deep.

Montague Brit. Shells. p. 434. tab. 13. f. 2.

Shell the tenth of an inch wide, rather conic and obtuſe, with 5 much rounded and deeply divided whorls: *aperture* lunate, not reflected.

519. H. *trochiformis*, Horn-colour, pellucid, subconic, with 6 rounded smooth whorls; aperture somewhat lunate, transversely compressed.

Montague Br. Shells p. 427. tab. 11. f. 9.

Shell an eighth of an inch wide, and about as much high, sometimes with a rufous tinge, with 6 whorls deeply divided; *lip* thin, a little reflected, and forming a slight perforation.

520. H. *Lacuna*. Pale horn-colour, subglobular, with 4 tumid smooth whorls: pillar grooved with a long canal.

Montague Brit. Shells. p. 428. *tab.* 13. *f.* 6.

Shell a quarter of an inch wide, about as much high; the 2 upper whorls placed rather laterally: *pillar lip* thick, white, grooved: *perforation* small, deep.

521. H. *spinulosa*. Brown-horny, subconic, with 5 convex whorls surrounded with sharp membranaceous rings and carinate with small spines on the back.

Montague t. 11. *f.* 10. *Phil. Trans.* 76. *t.* 2. *f.* 1-5.

Shell the tenth of an inch wide, covered with a rugged and spinous skin: *aperture* suborbicular.

522. H. *Pomatia*. Dirty-white, with mostly 3 reddish-brown bands on the larger whorl, subovate, obtuse, longitudinally striate: aperture round-lunate.

Br. Zool. t. 84. *f.* 128. *Donov. t.* 84. *Da Costa t.* 4. *f.* 14.

Shell 2 inches wide, ſubglobular, with 3 or more bands round the larger whorl, one of which continues round the reſt: *aperture* large, the margin a little thickened and reflected; pillar-lip reflected: *perforation* small.

523. H. *Arbustorum*. Mottled grey brown yellowish and chesnut, convex, pointed: aperture suborbicular, with a reflected margin, elongated on the fore-part.

Br. Zool. t. 85. *f.* 130. *Donov. t.* 136. *Da Costa t.* 17. *f.* 6.

Shell hardly 3 quarters of an inch wide, slightly umbilicate, pale or yellow-cheſnut marbled with oblong brown spots, and generally with a single ſpiral brown band, within cheſnut with a broad pure white border.

524. H. *resupinata*. Horn-colour, glossy, with a large oval aperture, and the whorls of the tip reversed.

Walker Minute Shells f. 24. Minute.

525. H. *globosa*. White, opake, glossy, round, with 2 smooth whorls, and roundish aperture.

Walker minute Shells f. 25.

526. H. *reticulata*. White, pellucid, reticulate, subumbilicate, with a single whorl, and rounded margined aperture.

Walker minute Shells f. 26. *Adams Microsc. t.* 14. *f.* 12.

527. H. *unispiralis*. White, opake, smooth, umbilicate both sides, with a single spire, and rounded aperture.

Walker minute Shell. tab. 1. *f.* 27.

528. H. *striata*. Greenish-white, pellucid, striate, with 3 whorls reflected on the back: aperture suboval.

Walker minute Shells f. 29. *Adams Microsc. t.* 14. *f.* 13.

529. H. *coarctata*. White, pellucid, with 2 whorls: aperture roundish, contracted near the umbilicus.

Walker Minute Shells f. 30.

530. H. *tubulata*. With 3 longitudinally striate whorls, and a margined protruded tube at the base.

Adams Linn. Trans. iii. *p.* 67. *t.* 13. *f.* 35. 36.

Shell with a margined tube extending beyond the ſurface of the shell, in the place of an umbilicus.

531. H. *fasciata*. White with 3 transverse rich marone belts on the first whorl, smooth: whorls 3, the first more tumid.

Adams Linn. Trans. v. *t.* 1. *f.* 20. 21.

Shell slightly umbilicate, pellucid, with 3 belts, the middle-one broad, the two lateral-ones narrow.

532. H. *nitidissima*. Horny, glossy, with 2 whorls, very finely striate transversely.

Adams Linn. Trans. v. *t.* 1. *fig.* 22-24.

533. H. *bicolor*. Slightly umbilicate, smooth, with 2 whorls.

Adams Linn. Trans v. *tab.* 1. *f.* 25-27.

Shell differing from the last, in being perfectly smooth, entirely devoid of gloſsiness, and in having the inside of the shell white.

C. *With rounded whorls, imperforate.*

534. H. *vivipara*. Yellowish-olive, with 3 brown bands, subconic, obtuse, finely striate: aperture suborbicular.

Br. Zool. t. 84. *f.* 132. *Donov. t.* 87. *Da Costa t.* 6. *f.* 2.

Shell an inch and a half long, an inch wide, with 6 tumid whorls, the larger one with 3 narrow bands, the rest with 2, within ſmooth white banded: *aperture* contracted a little at the upper-part; pillar reflected.

535. H. *nemoralis*. Subglobular, diaphanous, variously banded: aperture roundish-lunate.

1. Citron fleſh-colour, or tawny, without visible bands: lips brown.

Da Costa t. 5. *fig.* 1. 2. 8.

2. Citron, greenish-yellow, or flesh-colour, with a single brown band: lips brown.

Da Costa t. 5. *f.* 3. *Donov. t.* 13. Upper and middle fig.

3. Citron, greenish-yellow, or flesh-colour, with numerous broader or narrower brown bands: lips brown.

Da Costa t. 5. *f.* 4. 5. *Donov. t.* 13. 3 lower fig.

4. Variously coloured and banded, leſs: lips white and thickened.

Chemn. Conch. 9. *t.* 113. *f.* 1199.--1201.

Shell about an inch wide, with 5 much rounded whorls, obtuse, smooth or slightly striate: *aperture* broader than it is long.

536. H. *hortensis*. Yellowish, with 4 tawny bands interrupted by white spots: lip pure white.

Br. Zool. t. 84. *f.* 129. *Donov. t.* 131. *Da Costa t.* 4. *f.* 1.

Shell an inch and a half wide, whitish or yellowish, with 4 interrupted bands, the third of which is broader, a little rugged with minute dots: *whorls* 4, with obscure plaits: *lip* margined, white.

537. H. *fusca*. Rufous horn-colour, pellucid, nearly smooth: aperture lunate.

Montague Brit. Shells p. 424, *tab.* 31, *f.* 1.

Shell about 3 eighths of an inch wide, hardly a quarter of an inch high, with 5 or 6 very slightly wrinkled whorls: *lip* thin, a little reflected at the lower margin. Resembles H. rufescens, but is leſs rugged, and has no trace of umbilicus.

538. H. *variegata*. Subpellucid, smooth, with 4 whorls marked with red lines; the first whorl tumid.

Adams Linn. Trans. iii. *p.* 67.

Shell imperforate, aperture with a much ſpread margin.

D. *Taper.*

539. H. *elegantissima.* White, glossy, tapering to a fine point, with oblique equidistant grooves: aperture a little angular below.

Montague t. 10. *f.* 2. *Donovan t.* 179. *f.* 1. Turbo.

Shell about a quarter of an inch long, often covered with a brown skin, with 9-13 flattish whorls, the ribs of which are broader than the grooves; *aperture* ſuborbicular; inner lip a little reflected.

540. H. *decussata.* White, tapering to a fine point, finely decussate: aperture angular at both ends.

Montague Brit. Shells p. 399. *tab.* 15. *f.* 7.

Shell 3 tenths of an inch long, with 8 or 9 slightly raiſed whorls, strongly striate longitudinally, and crossed by very fine lines; *aperture* ſuboval, contracted at both ends: *lip* slightly reflected.

541. H. *subulata.* Pale flesh-colour, with testaceous or chesnut spiral bands, tapering to a fine point, smooth: aperture oval.

Da Costa p. 117. *Donovan t.* 172. Turbo.

Shell 3 quarters of an inch long, glossy, ſometimes white or reddish, with about 10 flat whorls, marked with lighter or darker bands; *aperture* much rounded at top, and contracted at bottom.

542. H. *polita.* White, quite smooth, tapering to a point, imperforate: aperture oval.

Br. Zool. t. 79. upper fig. *Donovan t.* 177. Turbo.

Shell about half an inch long, polished, with 9-13 flat whorls: *aperture* ending in a sharp point; inner-lip reflected.

543. H. *bifaciata.* White, with an interrupted brown band, oblong, slightly wrinkled and umbilicate: aperture oval.

Br. Zool. t. 82. *f.* 119. *Donov. tab.* 18. * Turbo.

Shell nearly 3 quarters of an inch long, with rather rounded whorls, and brown or chesnut streaks forming a band or two at the base: *lip* a little reflected, forming a small perforation.

544. H. *octona.* Pale horny, with 8 rounded finely striate whorls, very slightly umbilicate: aperture roundish.

Linn. Transact. viii. *p.* 211. *tab.* 5 *f.* 10.

Shell about the size of a grain of rye, with 8 tumid whorls; *perforation* so ſmall as hardly to be diſtinguished: *aperture* nearly orbicular.

545. H. *octanfracta.* Horn-colour, with 8 flattish finely striate whorls, imperforate: aperture oval.

Br. Zool t. 86. *f.* 135. *Montague tab.* 11. *f.* 8.

Shell above 5 eighths of an inch long, often covered with a blackish skin: differs from the last in being of a more conic form, without the least trace of perforation, and in the whorls not being ſo distincly ſeparated.

546. H. *Lackhamensis.* Rusty-brown, oval-oblong, a little rugged, slightly perforated: aperture roundish-lunate, with a reflected margin.

Montague Brit. Shells p. 394. *tab.* 11. *f.* 3.

Shell 3 quarters of an inch long, rusty-brown varying to horn-colour and grey, with 7 flattish whorls: *aperture* whitish, with often a purplish tinge: *lip* reflected, and forming a linear cavity.

547. H. *obscura*. Brown-horny, opake, oval-oblong, with 5-7 rather rugged whorls, slightly perforated: aperture roundish-lunate, with a white lip.

Linn. Trans. viii. *t.* 5. *f.* 11. *Montague suppl t.* 22. *f.* 5.

Shell 3 eighths of an inch long, rather obtuſe, with rather rounded whorls: reſembles the laſt, but is about half the size, and more opake.

548. H. *lubrica*. Horn-colour, smooth, rather taper, with 6 somewhat rounded whorls, imperforate: aperture oval.

Linn. Trans. viii. *t.* 5. *f.* 12. *Br. Zool. t.* 82. *f.* 118.

Shell a quarter of an inch long, glossy, with a fulvous or yellowish tinge, rather obtuſe: *lip* thickish, generally reddish-brown.

549. H. *vitrea*. White, smooth. subcylindrical, with 4 rounded whorls: aperture oval, contracted, at one end.

Montague Brit. Shells. p. 321. *tab.* 12. *f.* 3. Turbo.

Shell an eighth of an inch long, pellucid, rather obtuſe: *aperture* not margined.

550. H. *Punctura*. Yellowish-white, conic, with 6 globular reticulate whorls: aperture suborbicular.

Montague Br. Shells p. 320. *tab.* 12. *f.* 5. Turbo.

Shell the tenth of an inch long, very minutely decussate, rather taper.

551. H. *arenaria*. White, conic, with 5 rounded whorls strongly striate longitudinally and very finely decussate: aperture oval.

Montague p. 322. *t.* 12. *f.* 4. Turbo decussatus.

Shell hardly the eighth of an inch long, rather glossy, not much pointed: *lip* thin: differs from the last in being more cylindrical, in its stronger longitudinal striæ, and in having the aperture contracted towards one end.

E. *Oval, imperforate.*

552. H. *stagnalis*. Horny, oval tapering to a point, somewhat angular: aperture oval, large.

Br. Zool. t. 86. *f.* 136. *Donovan. t.* 51. *f.* 2. *Da Costa t.* 5. *f.* 11.

Shell nearly 2 inches long, whitish, grey or dusky, very thin, with 6 or 7 whorls, the first very large and marked with a few irregular tranſverſe ridges, the rest ſuddenly tapering to a fine point; *aperture* very large; lip thin.

553. H. *fragilis*. Horn-colour, oval tapering to a point, cylindrical, pellucid: aperture oval oblong.

Montague Brit. Shell. p. 369. *tab.* 16. *f.* 7.

Shell extremely tender, pellucid, reſembling the last, but the whorls turn more obliquely, the larger not ſo tumid, and the aperture is ſmaller and more oblong.

554. H. *palustris*. Brown, horny, oblong, with 6 rather rounded whorls: aperture oval.

Br. Zool. t. 86. *f.* 136. *B. Donov. t.* 175, *f.* 1. 2. *Mont. t.* 16. *f.* 10.

Shell about 3 quarters of an inch long, grey or covered with a brown skin, minutely striate longitudinally and acroſs, purplish or brownish within: differs from S. stagnalis in being leſs, not ſo brittle, not tapering to ſo fine a point, and in the larger whorl being leſs tumid: *lip* reflected.

555. H. *fossaria*. Horn-colour, suboval, with 5 or 6 rounded deeply divided whorls: aperture oval.

Montague. t. 16. *f.* 9. *Linn. Trans* viii. *t.* 5. *f,* 9.

Shell 3 eighths of an inch long, thin, pellucid, reſembles the laſt but is much smaller, the whorls are more deeply divided and very rarely wrinkled acroſs, and the aperture is more oval.

556. H. *detrita*. Conic, white with a rufous spiral band or more: aperture oval.

Montague Brit. Shells. p. 384. *tab.* 11. *f.* 1.

Shell 3 quarters of an inch long, with 6 slightly rounded whorls, a little wrinkled longitudinally, generally marked with a single band, ſometimes with 3 on the larger whorl the middle one of which is narrower: *inner-lip* a little reflected, and forming a small depreſsion.

557. H. *succinea*. Oblong, acute, fulvous,, diaphanous, with 3 whorls: aperture oval.

Montague t. 16. *f.* 4. *Donov. t.* 168. *f.* 1. H. putris.

Shell hardly half an inch long, very thin and brittle, amber-colour, with the first whorl very large but not tumid: *aperture* reaching over more than half the shell: *lip* very thin.

558. H. *putris*. Oval, obtuse, yellow, with 4 whorls; aperture oval.

Br. Zool. t. 86. *f.* 137. *Montague t.* 16. *f.* 3. H. peregra.

2. With a white thick lip. *L. Trans.* viii. *t.* 5. *f.* 8.*

Shell an inch long, often covered with a dusky-brown skin, thin, with numerous oblique striæ: *whorls* 4, the first large and tumid: *aperture* reaching over 3 fourths of the shell.

559. H. *tentaculata*. Conic, obtuse, yellowish-white, with 5or 6 rounded whorls: aperture oval.

Br. Zool. t. 86. *f.* 140. *Donov. t.* 93. *Da Costa t.* 5 *f.* 12.

Shell half an inch long, diaphanous, with deeply divided whorls, rather obtuſe: *aperture* ſuborbicular, cloſed with a concentrally wrinkled lid.

560. H. *canalis*. Conic, horn-colour, with 5 smooth rounded whorls: aperture suborbicular; pillar with a groove.

Montague Brit. Shells p. 309. *t.* 12. *f.* 11. Turbo.

Shell 3 eighths of an inch long, pellucid, acute, with the first whorl large: *aperture* ſubangular; outer-lip thin; pillar broad, white, grooved, ending in a ſmall depression.

561. H. *auricularis*. Conic, smooth, yellowish-white, obtuse, with a short acute spire: aperture dilated, ear-shaped.

Br. Zool. t. 86. *f.* 138. *Donov. t.* 51. *f.* 1. *Da Costa t.* 5. *f.* 17.

2. *Montague p.* 381. *t.* 16. *f.* 1. H. limoſa.

Shell an inch or more long, often covered with a brown skin, with 4 whorls, the first very large and tumid and finely striate acroſs, within yellowish: *lip* much extended, a little reflected, ſometimes projecting into an angle above.

562. H. *glutinosa*. Very tumid, yellow horn-colour, with 3 whorls ending in an obtuse spire: aperture oval, very large.

Montague Brit. Shells. p. 379. *tab.* 16. *f.* 5.

Shell above half an inch long, very thin and brittle, ſmooth or faintly wrinkled, ſometimes covered with a glutinous skin: *aperture* reaching nearly to the tip.

563. **H.** *lutea.* Suboval, dull orange, with about 3 whorls ending in an obtuse spire: aperture oval, very wide.

Montague Brit, Shells p. 385. *t.* 16 *f.* 6.

Shell nearly half an inch long, ſmooth; the first whorl very large: *lip* a little ſpread: reſembles H. auricularia 2. but is less, not ſo tumid, and thicker and stronger.

564. **H.** *lævigata.* Flesh-colour, very obtuse, with 3 whorls; the first very large and wide, the others minute and placed laterally.

Br. Zool. t. 86. *f.* 139. *Donovan tab.* 105.

Shell about the size of a pea, suborbicular, yellowiſh or reddish fleſh-colour, very thin and brittle, pellucid, with the ſmaller whorls placed laterally and hardly raiſed, finely striate longitudinally and wrinkled transversely, often covered with a thick brown skin: *aperture* very wide and rounded, thin, within whitish or or purplish-brown.

565. **H.** *bulloides.* Horn-colour, oval, smooth, glossy, with 3 reversed whorls: aperture oval.

Donovan's Brit. Shells. v. *tab.* 168. *f.* 2.

Shell 3 eighths of an inch long, dark horn-colour, brittle, obtuse; the first whorl very large but not much inflated.

60. NERITA. *Nerite.*

566. **N.** *Canrena.* Smooth, with a slightly raised and pointed spire, and gibbous cloven umbilicus.

Donovan's Brit. Shells. v. *t.* 167. N. intricata.

Shell about the size of a hazel nut, whitish, with yellowish or ferruginous zigzag marks spirally disposed: *aperture* wide, semicircular: *perforation* deep, cloven.

567. **N.** *glaucina.* Smooth, with a rather obtuse spire: umbilicus partly closed by the thick white reflected lip.

Br. Zool. t. 87. *f.* 141. *Donov. t.* 20. *f.* 1. *Da Costa t.* 5. *f.* 7.

Shell about half an inch long, white, grey, reddish or livid, with generally a chain of zigzag short bluish or cheſnut lines round the ſutures of the whorls: *spire* obtuse, a little pointed: *aperture* roundish-lunate.

568. **N.** *Mammilla.* Oval, smooth, white or yellowish: umbilicus nearly closed by the reflected lip: aperture oval.

Donovan Brit. Shells. tab. 144. N. nitida.

Shell about half an inch long, polished, oval-oblong, with a short spire, the sutures of which are nearly obliterated: *aperture* oval; lip toothless, gibbous beneath: *perforation* nearly closed by the reflected lip.

569. **N.** *fluviatilis.* Suboval, rugged. imperforate: lips toothless.

Br. Zool. t. 87. *f.* 142. *Donov. t.* 16. *f.* 2. *Da Costa. t.* 3. *f.* 17. 18.

Shell 3 eighths of an inch long, generally white reticulately marked or spotted with various shades of pink purplish or brown, sometimes with a spiral band or two, covered with a brown or yellowish skin, under which it is gloſsy or finely wrinkled: *whorls* 3, the first very large, the spire obtuse: *aperture* nearly the whole length of the shell: *pillar* broad flat, white: *mouth* covered with an orange lid.

570. **N.** *pallidula.* Yellowish horn-colour, smooth, with a large umbilicus: aperture semilunar, much spread.

Donovan t. 16. *f.* 1. *Da Costa p.* 51. *t.* 4. *f.* 4. 5.
Shell near half an inch long, convex, with the ſpire a little prominent, covered with a brown skin, the first whorl very large, ſometimes faintly wrinkled: *lip* thin, fringed by the skin; pillar thick, white.

571. N. *littoralis*. Globular, thick, smooth with a flat spire: lips toothless.
Br. Zool. t. 87. *f.* 143. *Donov. t.* 20. *f.* 2. *Da Costa t.* 3. *f.* 7.
Shell 3 quarters of an inch high, nearly as much broad, thick, strong, various shades of yellow red or brown, often variegated in numerous varieties, ſometimes banded, with 4 or 5 whorls, the first very large: *aperture* ſuborbicular, or inclining to oval, with the margin thickened within.

572. N. *pellucida*. Pellucid, smooth, with 3 whorls.
Adams Linn. Trans. iii. *p.* 67. Minute.
2. Subpellucid, ſmooth, with 2 whorls.
Adams Linn. Trans. iii. *p.* 67. N. alba.
The two last may probably be only the young shells of N. glaucina.

61. HALIOTIS. *Sea ear.*

573. H. *tuberculata*. Dull rufous-brown, suboval, transversely rugged and tubercled on the back.
Br. Zool. t. 88. *f.* 144. *Donov. t.* 5. *Da Dosta t.* 2. *f.* 1. 2.
Shell 3 or 4 inches long, 2 or 3 wide, ſometimes mottled, striate longitudinally, wrinkled tranſverſely, with a few raiſed tubercles, perlaceous within, open near the whole length, with a thin irregular outer margin: *lip* white, inflected: *spire* a little raiſed: *perforations* about 20-28, of which 5 or 6 are open.

62. PATELLA. *Limpet.*

A. *Furnished with an internal lip.*

574. P. *chinensis*. Subconic, smooth, entire, whitish, internal lip lateral.
Donovan tab. 129. P. pallida.
Shell above half an inch wide, not ſo much high, ſubconic, whitish or pale brown, entire at the margin, with the crown central ending in a ſmall whorl, concentrically wrinkled and rough with ſmall concave ſcales; within glossy, white, with a broad flat thin ſub-ſpiral lip near the margin.

B. *With the margin angular, or irregularly toothed.*

575. P. *vulgata*. With about 14 obsolete angles, and dilated acute margin.
Br. Zool. t. 89. *f.* 145. 146. *Donov. t.* 14. *Da Costa t.* 1. *f.* 1. 2. 8.
Shell 2 inches or more wide, conic or a little depressed, dirty green or brown, ſometimes varied with ferruginous or brown marks, finely striate longitudinally, within glossy, yellowish horn-colour, whitish at the bottom: *crown* rather obtuſe, nearer the ſmaller end: *margin* ſometimes indented, ſometimes entire.

C. *With a pointed recurved crown.*

576. P. *Mitrula*. Entire, subconic, white, with concentric imbricate wrinkles.
Montague Brit. Shells p. 486. *t.* 13. *f.* 9. P. antiquata.
Shell about half an inch wide, thick, opake: *aperture* oval: *crown* recurved, nearer one end.

577. P. *ungarica.* Entire, conic, longitudinally striate, with a pointed hooked revolute crown.

Br. Zool. t. 90. *f.* 147. *Donov. t.* 21. *f.* 1. *Da Coſta t.* 1. *f.* 7.

Shell about an inch wide, reddish or fleſh-colour, often covered with a hairy skin, ſometimes tranſverſely plaited, within ſmooth roſy-white: *margin* often crenate: *crown* on one side, much recurved.

578. P. *militaris.* Entire, white, conic, striate and faintly reticulate, with a pointed hooked obliquely recurved crown.

Montague tab. 13. *f.* 11. *Donovan tab.* 171.

Shell about half an inch wide, finely striate both ways: *crown* revolute, turning to one side: *aperture* nearly orbicular.

579. P. *intorta.* Nearly entire, ferruginous, with alternately larger and lesser ribs: crown slightly recurved.

Br. Zool. tab. 90. *f.* 148. *Donovan tab.* 146.

Shell near an inch wide, covered with a ferruginous skin, generally decorticated at top, pale within, with numerous ſubimbricate ribs: *aperture* oval: *margin* entire or slightly toothed.

580. P. *lacustris.* Very entire, oval, whitish, membranaceous, with a pointed recurved crown.

Donovan tab. 147. *Da Costa tab.* 2. *f.* 8.

Shell a quarter of an inch wide, covered with a greenish or dusky skin, ſometimes slightly striate or tranſverſely wrinkled: *crown* pointed, near one end.

581. P. *oblonga.* Very entire, oblong, contracted in the middle, horn-colour, with a pointed reflected oblique crown.

Donovan t. 150. *Philos. Trans.* 76. *t.* 3. *f.* 1. 2. 3. 5.

Shell a quarter of an inch long, one tenth wide, covered with a greenish skin: *crown* ſmall, turning to one side, near the narrow part of the margin.

D. *Entire, without the pointed crown.*

582. P. *pellucida.* Obovate, gibbous, pellucid, yellowish-horn-colour with 4 blue rays of dots on one side.

Br. Zool. t. 90. *f.* 150. *Donov. t.* 3. *f.* 1. *Da Coſta t.* 1. *f.* 5. 6.

Shell 3 quarters of an inch wide, more or leſs conic, ſometimes a little depressed with an obſcure crown, with 3-5 rays of blue dots on one side from the crown to the margin.

583. P. *parva.* Entire, oblong-orbicular, white with reddish rays, finely striate, with the point of the crown nearly marginal.

Donovan tab. 21. *f.* 2. *Da Costa tab.* 8. *f.* 11.

Shell 3 eighths of an inch long, 2 eighths wide, mostly covered with a dusky skin, circularly wrinkled, whitish or bluish, radiate with reddish, more or less distinctly: *crown* obtuſe; *margin* very entire.

584. *P. bimaculata.* Yellow, with an oblong black spot at each end, oval, convex, depressed, with an obsolete crown.

Montague Brit. Shells, p. 482. *tab.* 13. *f.* 8.

Shell a quarter of an inch long, an eighth wide, opake, ſmooth, with a tranſverſe oblong black ſpot at the ſmaller end, and a longitudinal one near the margin, within yellow; *margin* thin.

585. P. *Rotula.* White, opake, flat, round, with a regularly toothed margin.

Kanm. and Adams Microsc. p. 635. *t.* 14. *f.* 9. P. Rota.
Found at Sandwich: very minute and rare.

E. *With the crown perforated.*

586. P. *Fissura.* Oval, reticulate, cloven half way up on the fore-part: crown a little recurved.

Br. Zool. t. 90. *f.* 152. *Donov. t.* 3. *f.* 2. *Da Costa t.* 1. *f.* 4.
Shell half an inch long, 3 eighths wide, conic, brown or white, within white or flesh-colour: margin crenate, with a slit on one side half way to the crown.

587. P. *græca.* Oval, convex, strongly reticulate, crenate on the margin within.

Br. Zool. t. 89. *f.* 153. *Donov. t.* 21. *f.* 3. *Da Costa t.* 1. *f.* 3.
Shell about 3 quarters of an inch long, hardly half an inch wide, a quarter high, dull brown, within white or radiate with dull purple, ſomewhat tubercled by the croſsing of the tranſverſe striæ: *margin* indented: *crown* not central, truncate, with an oblong perforation.

588. P. *Apertura.* Subconic, white, strongly ribbed longitudinally with a few transverse ridges: crown recurved.

Montague Brit. Shells. p. 492. *tab.* 13. *f.* 10.
Shell hardly a quarter of an inch long, not an eighth high, glossy white within, with strong longitudinal tubercled ribs croſsed by a few ridges: *crown* reflected, with a rhombic perforation: *margin* oval, crenulate.

63. DENTALIUM. *Tooth-shell.*

589. D. *Dentalis.* White, slightly curved, interrupted, with about 20 striæ.

Rumph. mus. t. 41. *f.* 6. *Born. mus. t.* 18. *f.* 13.
Shell about half an inch long, tapering to a fine point, pervious, closely striate, with sometimes a few faint annulations at the larger end, opake white, ſometimes tipt with red.

590. D. *Entalis.* White or yellowish, slightly curved, smooth, continued.

Br. Zool. t. 90. *f.* 154. *Donov. t.* 48. *Da Costa t.* 2. *f.* 10.
Shell an inch and a half long, tapering to a ſmall point, pervious, smooth or very minutely striate, with a few circular annulations, truncate at the tip.

591. D. *Gadus.* White, glossy, smooth, slightly curved, inflated near the larger end.

Montague Brit. Shells. p. 496. *tab.* 14. *f.* 7.
Shell hardly 3 eighths of an inch long, nearly straight, contracted at the larger end, with a rather sharp point.

592. D. *striatulum.* Green tipt with white, slightly curved, with 8 angles, and as many ribs.

Donovan Brit. Shells. v. *tab.* 162.
Shell about an inch and a half long, sometimes grey-white, with the larger aperture angular, and the smaller one very narrow and orbicular.

593. D. *imperforatum.* Whitish, slightly curved, cylindrical, transversely striate, truncate and imperforate at the smaller end.

Walker. Min. shells. f. 15. *Adams Microsc. t.* 14. *f.* 8.

Shell the eighth of an inch long, white or cinereous, a little contracted at the margin, with the smaller end closed and furnished with a small round protuberance.

594. **D. *Trachea*. Ferruginous, cylindrical, curved, with numerous close-set strong annulations, truncate and imperforate at the smaller end.**

Montague Brit. Shells- p 497. *tab.* 14. *f.* 10.

Shell rather more than the eighth of an inch long, with a small round protuberance at the closed end: differs from the laſt, in being more curved more strongly and regularly wrinkled, and in having the margin of the aperture not contracted.

595. **D. *glabrum*. Glossy-white, cylindrical, curved, quite smooth, closed rounded and slightly margined at one end.**

Montague Brit. Shells p. 497. *n.* 6.

Shell hardly a line long, equal in size its whole length, without striæ or wrinkles; *aperture* orbicular.

64. VERMICULUM.

A. *More or less convolute.*

596. **V. *incurvatum*. White, semitransparent, straight, with 3 close whorls at the smaller end.**

Walker minute Shells f. 11. *Adams Microsc. t.* 14. *f.* 7.

2. With a single whorl at the tip, pervious.

Walker Minute Shells f. 12. *Montague p.* 518. S. pervium.

Shell hardly a line long, reſembling Nautilus ſemilituus, but is quite ſmooth, cylindrical, without ſyphon or internal chambers.

597. **V. *bicorne*. White, opake, semilunar, inflated in the middle.**

Walker minute Shells f. 2. 3. *Adams Microsc. t.* 14. *f.* 2. 3.

Shell a line long, tapering to each end.

598. **V. *Seminulum*. White, opake, smooth, oval, compressed, with 3 or 4 whorls.**

Walker Minute Shells f. 1. *Linn. Trans.* v. *t.* 1. *f.* 28-30.

Shell the tenth of an inch wide, with the whorls more or leſs orbicular or oval: *aperture* compressed, ſemilunar.

599. **V. *subrotundum*. White, opake, suborbicular, subcompressed, of 3 whorls, the middle-one elevated on the upper-side.**

Walker minute Shells f. 4. *Montague p.* 521. *n.* 6.

Shell half a line wide, ſmooth, the middle whorl raised above the others on the upper-side, and not visible beneath: *aperture* angular, with a yellow margin.

600. **V. *oblongum*. White, opake, glossy, oblong-oval, sub-compressed, with a single longitudinal suture on one side.**

Montague Brit. Shells p. 522. *tab.* 14. *f.* 9.

Shell hardly half a line long, with a single longitudinal ſuture on one side, dividing the shell into two parts, on the other the middle whorl is ſurrounded by a faint depression: *aperture* a little produced, oval, with a yellow margin.

B. *Bottle-shaped, not convolute.*

601. **V. *lacteum*. Oval, thin, pellucid, smooth, with milky veins.**

Walker Minute Shells f. 5. *Adams Microſc. t.* 14. *f.* 4.

Shell half a line long, slightly compreſsed, divided into about 4 departments by the milky lines, with an opake white border.

602. V. *striatum.* Suboval, gloſsy white, pellucid, with a slender produced mouth, and longitudinal opake striæ.

Walker f. 6. *Adams Micr. t.* 14. *f.* 5. Serpula Lagena.

Shell not half a line long, shaped like an oil-flask.

603. V. *globoſum.* Globular, white, transparent, with the mouth hardly produced.

Walker Minute Shells f. 8. *Montague p.* 523.

Shell rather leſs than the last, from which it differs in being destitute of striæ, and in not having a lengthened mouth.

604. V. *læve.* Bluish-white, transparent like glass, oval, smooth, with a produced mouth.

Walker min. Shells f. 9. *Montague p.* 524. *n.* 11.

Differs from the last, in being of a more oblong shape, of a glass-like transparency, and in having a lengthened mouth.

605. V. *marginatum.* White, transparent, a little compressed, surrounded longitudinally by a raised ridge.

Walker min. Shells f. 7. *Montague* 524. *n.* 12.

Reſembles V. globoſum, but is rather less, more compressed, and has a raiſed margin round it longitudinally.

606. V. *squamosum.* White, subglobular, marked with undulate striæ like the scales of a fish: mouth a little produced.

Montague Brit. Shells p. 526. *tab.* 14. *f.* 2.

Shell reſembling V. striatum, but instead of being striate longitudinally, is covered with tranſverſe undulations exactly reſembling a fishes ſcales.

607. V. *perlucidum.* White, transparent, subglobular, with a long cylindrical neck, and a small knob at the base, and 6 strong equidistant longitudinal ribs.

Montague Brit. Shells p. 525. *tab.* 14. *f.* 3.

Shell not the tenth of an inch long, glossy, shaped like a wine-bottle.

608. V. *Urnæ.* White, semitransparent, smooth, urn-shaped, with a conic neck, and slended appendage at the base.

Montague Brit. Shells p. 525. *tab.* 14. *f.* 1.

Shell hardly a line long, glossy, round with a gradually tapering neck like an urn, and a slender appendage or knob at the baſe.

65. SERPULA.

A. *Spiral.*

609. L. *Sprillum.* Glossy-white, pellucid, regular, orbicular, with round gradually decreasing whorls.

Pultn. in Hutch. Dorset. p. 52. *tab.* 19. *f.* 27.*

2. With the whorls in a contrary direction.

Walker minute Shell. tab. 1. *f.* 13. 14.

Shell a line in diameter, with 2 or 3 slightly wrinkled whorls, mostly placed laterally and umbilicate in the centre.

610. S. *minuta.* Dirty-white, opake, regular, orbicular, with rounded whorls in a contrary direction.

Montague Brit. Shells p. 505. *n.* 9.

Shell not more than the thirty-ſixth of an inch in diameter, tranſverſely wrinkled, with ſometimes a ſlight ridge along the back.

611. S. *ſpirorbis.* **White, opake, regular, orbicular: whorls ſlightly channelled above inwardly, gradually decreaſing.**

Br. Zool. t. 91. *f.* 155. *Donov. t.* 9. *Da Coſta t.* 2. *f.* 11.

Shell the eighth of an inch wide, ſmooth or ſlightly wrinkled, rounded above, flattiſh underneath, umbilicate in the middle.

612. S. *granulata.* **White, opake, cluſtered, round, with 3 elevated ribs on the upper ſide.**

Donovan Brit. Shells. tab. 100.

Shell about the ſize of the laſt, ſpiral but not quite regular, ſlightly umbilicate, with two whorls.

613. S. *heteroſtropha.* **Dirty-white, round: whorls with 3 ribs, turning in a contrary direction.**

Montague Brit. Shells p. 503 *n.* 7.

Shell reſembling the laſt, but is about half the ſize, with leſs eminent ribs, and the whorls are placed in a contrary direction: *aperture* orbicular.

614. S. *carinata.* **White, opake, regular: the outer whorl with a reticulate ridge at top.**

Montague Br. Shells p. 502. *n.* 4.

Shell about half the ſize of S. ſpirorbis, concave and ſometimes pervious in the middle, a little ſpreading at the baſe.

615. S. *corrugata.* **White, regular, rough with tranſverſe wrinkles, umbilicate.**

Montague Brit. Shells p. 502. *n.* 5.

Shell about the eighth of an inch wide, differing from S. Spirillum in being ſtronger, and not expoſing ſo much of the inner whorls.

616. S. *cornea.* **Horn-colour, pellucid, regular, rounded, with 3 whorls.**

Adams Linn. Trans. 5. *t.* 1. *f.* 33-35.

617. S. *lucida.* Round, quite ſmooth, pellucid, gloſſy, vitreous, with the whorls turning in a contrary direction.

Adams Linn. Trans. 5. *t.* 1. *f.* 31. 32.

Shell half a line in diameter, with the whorls ſometimes unconnected: *aperture* often projecting upwards.

618. S. *reverſa.* White, ſubcylindrical, rugged, ſpirally or irregularly twiſted: aperture turning in a reverſed direction.

Montague Brit. Shells p. 508, *n.* 11.

Shell the tenth of an inch wide, tranſverſely wrinkled, ſometimes pretty regularly ſpiral, ſometimes variouſly twiſted, with the aperture always reverſed. Probably only a variety of S. vermicularis, for the inhabitant is the ſame.

B. *Contorted, irregular.*

619. S. *vermicularis.* White, cylindrical, tapering, rugged, variouſly curved and twiſted.

Br. Zool. t. 91. *f.* 158. *Da Coſta p.* 18. *tab.* 5. *f.* 2.

Shell from the ſize of a large thread to that of a Swan's quill, frequently cluſtered, totally affixed to ſome other ſubſtance, never carinate along the back. *Inhabitant* with branched fringed tentacula, ſpotted with red, and furnished with a double trumpet-shaped proboſcis.

620. S. *triquetra*. White or reddish, rugged, creeping, variously twisted, triangular.

Br. Zool. t. 91. *f.* 157. *Donovan t.* 95. *Sow. Misc. t.* 31.

Shell reſembling the last, but is carinate along the back, and has generally the baſe a little ſpread, giving it a triangular appearance. *Inhabitant* with double feathered tentacula, and a single trumpet-shaped proboscis.

621. S. *tubularia*. White, round, taper, slightly rugged, affixed and convolute at the smaller end.

Montague Brit. Shells p. 513. *n.* 14.

Shell 4 or 5 inches long, 2 tenths of an inch wide at the larger end, with an orbicular aperture, detached and aſcending at the larger end, affixed and flexuous or convolute at the ſmaller. *Inhabitant* with double yellowish feathered tentacula annulate with pink, without the trumpet-like proboscis; head long, white, barred with pink and green.

66. TEREDO. *Ship-worm.*

622. T. *navalis*. Extremely thin and brittle, cylindrical, taper, smooth.

Donovan tab. 145. *Philos. Transact.* 1806. *t.* 12. 13.

Shell 4-6 inches long, whitish, a little flexuous, more or less obtuſe and strong at the tip, finely striate longitudinally, with internal plates contracting the part to a ſmall orifice : *aperture* orbicular.

67. SABELLA.

623. S. *alveolata*. With numerous parallel tubes cemented together, with their mouths somewhat funnel-form.

Donovan t. 139. *Br. Zool. t.* 92. *f.* 162. *Ellis Corall. p.* 90. *tab.* 35.

Tubes nearly straight, 2 or 3 inches long, forming large masses, compoſed of sand and fine fragments of shells, with their apertures dilated, reſembling a piece of honey-comb.

624. S. *Penicillus*. Brown, cylindrical, taper, with an interior smooth coriaceous subpellucid coat.

Sowerby Misceli. t. 12. *Ellis Corall. p.* 92. *t.* 84.

Tube ſolitary, 6 or 7 inches long, nearly straight, ſmall and flexuous at the ſmaller end, ſometimes faintly wrinkled; the outer-coat compoſed of the finest particles of ſand and earth agglutinated : *aperture* a quarter of an inch wide.

625. S. *granulata*. Straight, thin, brittle, tapering, without internal coat.

Donovan t. 233. *Br. Zool. t.* 92. *f.* 163.

Tube ſolitary, brownish, 2 inches or more long, 3 eighths of an inch wide at the larger end, tapering to about half as much at the ſmaller, compoſed of fine agglutinated ſand.

626. S. *Chrysodon*. Cylindrical, papyraceous, nearly of equal size throughout, straight, surrounded with branched fibres at the mouth.

Pall. Mise. Zool. t. 9. *f.* 14-16. *Montague p,* 546. *n.* 4.

Tube ſolitary, about the size of a gooſe-quill, compoſed of ſand, fragments of shells, or ſmall flat pieces of stone cloſely cemented on a tubular membrane : *aperture* furnished with numerous long fibres, projecting in a ſomewhat funnel-shaped manner, but a little compressed sideways

627. S. *conchilega*. Thin, brittle, usually attached its whole length in a serpentine manner on old bivalve shells.

Brit, Zool. n. 161. *tab.* 26. lower figure.

Shell compoſed of large fragments of shells, and very little ſand cemented on a thin membrane, 4 or 5 inches long, often interwoven together: differs from the last, in being attached, in its larger component parts, and in wanting the funnel-shaped fibrous mouth.

628. S. *lumbricalis*. Coarse, attached, variously twisted and entwined, composed of coarse sand with fragments of shells cemented together.

Montague Brit. Shells. p. 549. *n.* 6.

Shell with a strong tube, 2 or 3 inches long, a quarter wide, strongly fixed to stones and other bodies. *Inhabitant* with a rather ſpreading proboſcis, fringed round the edge with bristles: mouth with 4 long bristles, and intermediate shorter-ones: head with numerous capillary red tentacula on the back part.

629. S. *cirrata*. Thick, brittle, a little tapering, composed of sand mixed together and slightly cemented.

Montague Brit. Shells p. 550. *n.* 7.

Shell 6 or 7 inches long, ſoft when moist, crumbling when dry. *Inhabitant* red, annulate, round, with triple lateral faſcicles.

630. S. *arenaria*. Cylindrical, equal in size at both ends, very brittle, composed of sand slightly cemented without internal membrane.

Montague Brit. Shells. p. 552. *n.* 8.

Shell about the size of a raven's quill: reſembles S. granulata, but is less, of equal thickness throughout, and has no internal membrane.

631. S. *subcylindrica*. Subcylindrical, slender, brittle, composed of fine sand and minute particles of broken shells, cemented on a fine membrane, adhering by their flat sides.

Shell about 3 inches long, the tenth of an inch wide, of nearly the ſame size throughout.

632. S. *setiformis*. Slender, tapering, composed of very fine fragments of shells and stones, placed obliquely and imbricate over each other.

2. Fragments not imbricate, with ſometimes a lateral branch near the ſmaller end.

Montague Brit. Shells p. 553. *n.* 10.

Shell 3 or 4 inches long, double the size of a hog's bristle, tapering to half the size at the lower-end.

633. S. *curta*. Short, a little taper, affixed by the smaller end, composed of sand and minute fragments of shells cemented on a tough membrane.

Montague Brit. Shells p. 554. *n.* 11.

Shell ſometimes formed of ſand only, hardly half an inch long, the size of a crow's quill, generally naked at the lower-end for half its length, and fixed by its flexible membrane.

634. S. *compressa*. Short, broad, very flat, composed of large fragments of flat bivalve shells with their convex sides upwards.

Montague Brit. Shells p. 555. *n.* 12.

Shell about an inch and a half long, formed of 5 or 6 large fragments of shells with their concave sides placed downwards, leaving a narrow opening at the ends of each.

ORDER IV. ZOOPHYTA.

68. MADREPORA. *Madrepore.*

635. M. *verrucaria*. Star single, semiorbicular, sessile, with a convex disk full of tubular pores and radiate round the border.

Soland and Ellis Zooph. p. 137. *n.* 13. *Ginan. Adr.* 10. *t.* 4. *f.* 13.

Size of a split pea, white or yellowish, with aggregate tubes on the disk like the florets of a composite flower, and a flattened striate border like the rays of theſe flowers. It appears an intermediate ſpecies between the Madrepore, Tubipore, and Millepore.

636. M. *musicalis*. Aggregate, cylindrical, distant, striate, united by numerous transverse psrtitions.

Borlase Cornwall t. 27. *f.* 7. *Phil. Trans.* 53. *t.* 20. *f.* 14.

Sometimes cast on the Irish coast, and is often found petrified: *corals* nearly straight, from an inch to 2 long, white, stellate and flat at top.

69. MILLEPORA. *Millepore.*

637. M. *cervicornis*. Somewhat compressed, forked, with cells on both sides, and rather prominent tubular florets.

Borlase Cornw. t. 24. *f.* 7. *Mars. Mar. t.* 32. *f.* 152. 153.

Coral 5 or 6 inches high, reddish or yellowish-brown, whitish within, appearing as if covered with a varnish, branched like the horns of a stag; ſome of the pores divided at the baſe.

638. M. *Skenei*. Flat, slightly branched, with cells on both sides disposed in alternate rows: cells turbinate, with a gaping mouth, and covered with a helmet; the under-lip with a small tooth.

Solander and Ellis Zooph. p. 135. *n.* 9.

Found adhering to rocks near *Aberdeen*, of a bright shining white colour, and appearing as if covered with a silver varnish.

639. M. *compressa*. Compressed, branched, more or less truncate: pores every where a little prominent and rough.

Sowerby's British Miscellany i. *p.* 83. *tab.* 41.

Coral about 2 inches high, reddish-grey, with distant branches.

640. M. *lichenoides*. Caulescent, decumbent, with waved bifariously forked branches above with the pores a little prominent, striate beneath.

Ellis Corall. p. 95. *t.* 35. *f. B. b. Nat. Miscell. t.* 416.

Coral 2 or 3 inches long, milk-white, very brittle, with obtuſe denticulate branches.

641. M. *fascialis*. Membranaceous, flat, narrow, branched, flexuous, with pores on both sides.

Ellis Corall. p. 72. *t.* 30. *f. B. b. Borl. Cornw. t.* 24. *f.* 6.

Coral about 6 inches in diameter, growing in irregular masses:

branches flat, narrow, irregularly ſubdivided, coalescing, twisting, and branching out again, leaving hollow ſpaces between them.

642. M. *foliacea*. Foliaceous, flexuous, uniting here and there at the extremities, and covered with hardly visible pores on both sides.

Ellis. Corallines. p. 71. *tab.* 30. f. a. A. B. C.

From 3 inches to a foot long: white, stony.

643. M. *cellulosa*. Membranaceous, reticulate, funnel-form, irregularly waved and plaited on the margin, with numerous pores on one side.

Ellis. Corall. p. 72. *t.* 25. *f.* d. D. F. *Nat. Miscell. t.* 169.

About 3 inches high, solid, brittle, white or yellowish-grey, reſembling a piece of lace, consisting of a flat undulating membrane covered with large regular oval perforations on one side, quite smooth on the under-part between the openings; sometimes diſpoſed in a cup-ſhaped form; at other times running into loose folds with a waved margin, like a ruffle.

644. M. *polymorpha*. Crustaceous, solid, irregularly shaped, but generally branched and tubercled, with pores not visible to the naked eye.

Ellis. Corall. p. 76. *t.* 27. C. *Blackw. Herb. t.* 345.

Coral from 1 to 3 inches high, pure white, red, yellowish, greenish or grey; sometimes shaped like the kernel of a walnut; often in large compreſsed maſſes; sometimes like a small bunch of grapes; but most frequently in short irregular ramifications of a chalky tubercled appearance and stony substance. It is the common coral of the shops.

645. M. *Alga*. Consisting of very thin and brittle semicircular plates, disposed horizontally.

Solander and Ellis Zooph. p. 131. *n.* 3. *tab.* 23. *f.* 10.-12.

Found on the Cornish coast, covering the M. polymorpha, and is either red, purplish, yellow, or whitish; extremely brittle and thin, with ſemicircular plates of various sizes constantly growing horizontally, with their margins bending over, making them convex on the upper-side and concave underneath.

M. *tubulosa*. Crustaceous, parasitic, pale purple, with tubular pores disposed in transverse rows or whorls:

Ellis Corall. p. 74. *n.* 6. *tab.* 27. e. E.

Tubipora serpens. Gmel. 3754. *Turt.* iv. *t.* 614.

Found enveloping the stems of the Sertularia falcata: *tubes* erect or a little declining, minute, diſpoſed in rows over each other.

647. M. *liliacea*. Creeping, prostrate, in obtuse linear divisions, with tubular pores on the upper-surface disposed in transverse rows.

Mars. Hist. Mar. p. 153. *tab.* 34. *f.* 168. *n.* 4. 6.

Somewhat reſembles the laſt, but is white.

70. CELLEPORA. *Cellepore.*

648. C. *spinosa*. Parasitical, spongy, rough, consisting of globular cells armed at the mouth with a spinous tooth or two.

Ellis Corallines p. 72. *tab.* 30. *f.* d. D.

Found incrusting many of the Sertulariæ and Fuci; *cells* minute globular, open at top, guarded round the mouth with ſpines.

649. C. *pumicosa*. Parasitical, very brittle, consisting of prominent cells unarmed at the mouth.

Ellis Corallines p. 75. *tab.* 27. *f.* f. F,

Reſembles the last, but is more brittle, leſs globular, and the mouths of the cells are not invested with ſpines.

71. ISIS. *Coral.*

650. I. *Entrocha*. Stem testaceous, cylindrical, with orbicular perforated joints, and whorled forked branches.

Encyclop. Perthenſis tab. 137. *fig.* 22.

Most frequently found petrified. *Stem* about the thickneſs of a finger, with crowded flat orbicular joints perforated in the centre; the perforation pentangular, with the disk faintly striate from the centre: outer-bark or flesh unequal, and ſurrounded with a row of tubercles: *branches* thin, forked, continued and not jointed. It is probable therefore, that thoſe fossile bodies called *Entrochi*, are petrified ſpecimens of this coral.

72. GORGONIA. *Sea-fan.*

651. G. *Placomus*. Branching both ways, with flexuous rarely anastomosing branches covered with conic florets.

Ellis Coral. p. 67. *t.* 27. *f. A.* *Borlase Cornw. t.* 24. *f.* 1.

Coral erect, 2 feet high or more, woody, yellow, red or grey: *banches* flattish, bending irregularly towards each other, and rarely uniting: *florets* wart-like, ſurrounded at the top with ſmall ſpines.

652. G. *viminalis*. Slender, branched: florets seated all round the stem, each with a large valve and several smaller-ones.

Sow. Miscell. t. 40. *Soland. and Ell. Zooph. t.* 12. *f.* 1.

Coral a foot high, with a yellow bark and black horny bone: branches long, slender: *florets* white, a little prominent, with 8 claws.

653. G. *verrucosa*. Bifariously branched, with round flexuous branches, and a whitish calcarious bark covered with whitish prominent florets.

Philosop. Transact. 44. *p.* 51. *t.* 20. *and* 50. *t.* 34. *f.* 19. *a.*

Coral a foot and a half high or more, fan-shaped, dirty white or grey when dried: *bone* of a ſubstance between wood or horn.

654. G. *Anceps*. Slightly branched, with flat stem and branches, each with a row of florets along both the margins.

Ellis Coral. p. 68. *tab.* 27. *f.* g. *n.* 2,

Coral nearly 2 feet high, of a fine violet-colour when recent, yellowish or whitish when dry: *bone* roundish, ſmall at the ends, of a horny or leathery texture.

655. G. *Flabellum*. Reticulate, with the branches compressed on the inner-side: back yellow or purplish: bone black, horny and slightly striate on the larger branches.

Venus's Fan. *Ellis Coral. p.* 61. *tab.* 26. A.

Grows ſometimes to ſeveral feet high and expands into a large ſurface, fleshy, horny, black, clothed when fresh with a whitish or grey bark: pores irregularly placed, but generally in the form of a quincunx; *trunk* and *branches* pinnate, and by means of the ſmaller branches blending together, forming an elegant kind of net-work: *polypes* with 8 claws.

73. ALCYONIUM.

656. A. *digitatum*. Without stem, oblong, lobed, of a coriaceous wrinkled substance, covered with minute papillæ.

Dead man's hand. *Ellis Coral. p.* 83. *t.* 32. *f.* a. A. A. 2.

Of a tough fleshy substance, divided into 2 or 3 obtuſe lobes, pale reddish-grey without, whitish within, and covered with stellate warts, each protruding an 8-armed polype.

657. A. *Schlosseri*. Roundish, fleshy, livid, covered with obtusely-rayed yellow stars; the rays with each a single perforation towards the end.

Borlase Cornw. p. 254. *tab.* 25. *f.* 1. 2.

On the stems of Fuci: brown or greyish: *rays* much rounded, 5-12 on each star which is perforated at the baſe.

658. A. *Borlasii*. Spread, fleshy, dark green, covered with obtusely rayed yellow stars; the rays with each a double perforation near the end.

Borlase Cornw. p. 254. *tab.* 25. *f.* 3. 4.

Found coating rocks from 6 inches to 2 feet in extent, with about 10 rays in each star which are oblong, with a perforation near the end, and a ſmaller-one beneath it; centre of the star perforate.

659. A. *constellatum*. Spread, fleshy, reddish-brown, covered with acutely rayed stars, imperforate at the ends or centre.

Borl. Cornw. p. 254. *tab.* 25. *f.* 5. 6.

Reſembles the last, except that the rays are sharp-pointed, unequal, and without perforation.

660. A. *Bursa*. Subglobular, hollow, pulpy, green, with very thickset hyaline papillae.

Sea purſe. *Mars. Hist. Mar. p.* 80. *t.* 30. *n.* 69.

About the size of a ſmall apple, ſoft, coriaceous.

661. A. *Ficus*. Lobed like a pair of lungs, fleshy, dark olive or livid, covered with small 6-rayed stars, within full of small yellow particles like the inside of a fig.

Sea-fig, Sea lungs. *Ellis Coral. p.* 82. *t.* 17. *f.* b. B.

Rather compressed, full of clavate vesicles within filled with a yellow fluid.

662. A. *gelatinosum*. Gelatinous, yellowish, irregularly formed.

Pudding-weed. *Ellis Coral p.* 87. *tab.* 31. *f.* D.

Adhering to marine substances, roundish or branched.

663. A. *arenosum*. Crustaceous, Shaped like a horses hoof, pale yellowish-brown, consisting of agglutinated sand.

Ellis Coral. p. 74. *t.* 25. *f.* c. *Nat. Miscell. t.* 272.

Flustra arenoſa. *Linn. Trans.* v. *p.* 230. *tab.* 10.

Adhering to fuci and shells, covered with ſmall pores disposed in a quincunx, and is friable when dry.

664. A. *conglomeratum*. Gelatinous, convex, with conglomerate finger-like divisions, and toothless terminal mouths.

Gærtn. Pall. spic. Zool. 16. *p.* 39. *tab.* 4. *f.* 6.

On the Cornish coasts, whitish, with a central funnel-form cavity, and globular eggs.

665. A. *ascidioides.* Crustaceous, coriaceous, with scattered tubercles, each with 2 slightly toothed mouths.

Gært. Pall. ſpic. Zool. 10. *p.* 40. *n.* 3. *t.* 4. *f.* 7.

Adhering to the Fucus palmatus; pale reddiſh or ſaffron-colour, each of the tubercles perforated with a double minute ſcarlet orifice.

74. SPONGIA. *Sponge.*

666. Sp. *cancellata.* Reticulate, swollen and furnished with protuberant apertures at the junctures.

Sowerby Brit. Mescellany 1. *p.* 131. *tab.* 60.

Yellowish-brown, cancelled, with reticulate horny fibres.

667. Sp. *coronata.* Minute, consisting of a single rough tube crowned at top with a ray of spines.

Soland. and Ellis Zooph. p. 190. *n.* 13. *tab,* 58. *f.* 8. 9.

Pale yellow, with a bright pearl-colour crown, hollow and open at top, and when magnified appears as if covered with ſmall rising points.

668. Sp. *oculata.* Porous, soft, much branched; the branches a little compressed, erect, and often uniting together.

Ellis Coral. p. 80. *tab.* 32. *f.* F. f.

Yellowish, with very fine tender tranſparent ramifications which fequently inosculate, and are covered with minute pores: from 5 to 10 inches high.

669. Sp. *tomentosa.* Porous, irregularly formed, brittle, soft, downy, composed of minute spiculae crossing each other.

Ellis Coral. p. 80. *tab.* 16. *f.* d. d 1. D. 1.

When fresh of a bright orange colour and full of gelatinous flesh, when dry whitish and light, and if broken reſembles the crumb of bread; if rubbed on the hand it stings and raiſes blisters like Cowhage.

670. Sp. *compacta.* Tubular, branched, compact, brittle, composed of minute spiculæ crossing each other.

Sowerby Brit. Miscell. p. 85. *tab.* 42.

Resembles the last, but is of a greyiſh cast, more branched; with diſtinct prominent tubes, each ending in an opening.

671. Sp. *pulchella.* Smooth, soft to the touch, generally compressed and broad, composed of very fine reticulations.

Sowerby British Miscellany p. 87. *tab.* 43.

Sponge very irregular in shape, sometimes rather fan-shaped, sometimes palmate or digitate, pale brown, yellowish or reddish brown, without visible pores or tubes.

672. Sp. *stuposa.* Soft like tow, covered with fine pointed hairs, with cylindrical branches.

Philosoph. Transact. 55. *p.* 288. *tab.* 10. *f.* C.

About 3 inches high, of a pale yellow colour.

673. Sp. *cristata.* Flat, erect, soft, with rows of small rather projecting pores along the top.

Philos. Transact. 55. *p.* 288. *tab.* 11. *f.* G.

About 2 or 3 inches high, yellowish, growing something in the shape of a Cock's comb.

674. Sp. *palmata.* Palmate, with finger-like divisions round the surface, wooly: pores a little prominent, irregularly disposed.

Soland. and Ellis Zooph p. 189. *n.* 10. *tab.* 58. *f.* 6.

Reddiſh inclining to yellow, soft and woolly, with the diviſions a little subdivided at the top.

675. Sp. *botryoides.* Very tender, branched, consisting of clusters of oval tubercles open at the top.

Soland. and Ellis Zooph. p. 190. *n.* 12. *t.* 58. *f.* 1-4.

Bright shining white, in irregular maſses, like bunches of grapes; the surface when highly magnified, appearing as if covered with maſses of 3-rayed spinous stars.

676. Sp. *lacustris.* Uniform, creeping, brittle, with erect cylindrical obtuse branches.

Spongia ramosa fluviatilis. *Ray Hist.* 81.

At the bottom of lakes, covered with scattered pores, in which are sometimes found, during the Autumn, ſmall shining bluish globules, about the size of the seeds of thyme, which glitter in the flame of a candle. Theſe are probably extraneous bodies.

75. FLUSTRA. *Hornwrack. Sea Mat.*

677. Fl. *foliacea.* Foliaceous, branched, with rounded wedge-shaped divisions.

Ellis Corall. p. 70. *t.* 29. *fig.* a. A-E.

Adhering to shells, about 6 inches high, pale yellowish, porous on both ſurfaces, with rounded 4-toothed cells.

678. Fl. *truncata.* Foliaceous, branched, with linear truncate subdivisions.

Ellis Corall. p. 69. *tab.* 28. *fig.* a. A. B.

About 5 inches long, pale yellowish-brown, with slender branches, porous both sides, with oblong-ſquare cells.

679. Fl. *pilosa.* Foliaceous, variously branching, with a setaceous tooth on the lower part of each pore.

Ellis Corallines p. 73. *tab.* 31.

Found incrusting various Fuci and Sertulariæ, whitish, porous both sides, with round cells.

680. Fl. *chartacea.* Papyraceous, branched, with cells on both sides; the tops of the branches truncate like the edge of an axe.

Solander and Ellis Zoophytes p. 13. *n.* 4.

Thin, ſemitranſparent, like fine paper, very light straw-colour; the tops of the branches ſometimes digitated, ſometimes irregularly divided: *cells* oblong-ſquare, swelling out a little in the middle each side, defended by a helmet-like figure.

681. Fl. *carbasea.* Foliaceous, subdivided, with the cells in single layers.

Soland. and Ellis Zooph. p. 14. *n.* 5. *tab.* 3. *f.* 6. 7.

Thin like a piece of lawn, yellowish-brown: *cells* large, ovate above truncate beneath, the walls ſurrounding them appearing to be formed of a slender tube.

682. Fl. *dentata.* Foliaceous, parasitical, with shining oval cells in single layers, each with an inclined toothed mouth.

Ellis Corallines p. 73. *tab.* 29. *f.* D. D 1. E.

Adhering to Fuci and other marine ſubſtances, white, ſemitranſparent, with 4-toothed cells.

683. Fl. *avicularis*. Foliaceous, with faſcicled palmate truncate branches, smooth on one side, with opake beaked capsules near the edge formed like a parrot's beak: cells on one side, armed with branched spines.

Sowerby's British Miscellany ii. *p.* 21. *tab.* 71.

Blackiſh, about 2 inches acroſs, forming a ſphærical maſs: *cells* alternate, reſembling articulations, ſurrounded with long ſpines: *capsules* sessile.

684. Fl. *membranacea*. Parasitical, membranaceous, with oblong-quadrangular cells pointed at the upper projecting angles.

Mull. Zool. Dan. 1. *p.* 163. *tab.* 117. *f.* 1. 2.

Adhering to Fuci and shells, very thin, grey or whitiſh.

76. TUBULARIA.

685. T. *indivisa*. Clustered, with undivided jointed stems tapering to the base.

Ellis Corallines p. 31. *tab.* 16. *f.* c.

Stems 2 or 3 inches high, adhering to rocks and ſhells, ſtraw-colour, interwoven with each other, with very narrow joints barely twiſted; *bodies* of the polypes pale red, their heads bright crimſon.

686. T. *muscoides*. Clustered, simple or sligtly forked, here and there wrinkled their whole length.

Ellis Corallines p. 30. *tab.* 16. *f.* b.

Reſembles the laſt, but is about half the ſize and height and of equal thickneſs throughout, is ſometimes ſimply branched, with the joints twiſted here and there, and the polypes are rich crimſon.

687. T. *ramosa*. Solitary, much branched, equal, with the branches twisted at the forks.

Ellis Corallines p. 31. *tab.* 16. *f.* a. *t.* 17. f. a. A.

Stems 3 or 4 inches high, repeatedly forked, pale grey with crimſon heads, very ſlender, twiſted at the inſertion of the branches, and a little below them.

688. T. *fistulosa*. Repeatedly forked, with short cylindrical joints covered with lozenge-shaped impressed cells.

Ellis Corallines p. 46. *tab.* 23.

About 3 inches high, and about as thick as a piece of whipcord: *stems* ending in ſlender membranaceous tubes, the terminal branches clavate.

689. T. *Coryna*. Slightly branched, filiform, papyraceous, jointed, with ovate pointed capsules perforated with a dilatable mouth, and terminated by cylindrical armed tentacula.

Gartn. Pall. Spicil Zool. 10. *p.* 40. *tab.* 4. *f.* 8.

Adhering without tubular radicles to Fuci and Sertulariæ, ſandy or deep red, narrow at the baſe, without head or retractile tentacula: *capſules* perforated over the whole ſurface, protruding the hyaline tentacula globular at the end, and producing eggs at the baſe.

690. A. *affinis*. Simple, slightly annulate, soft, with

tapering tentacula surrounding the retractile papillary mouth.

Pall. ſpicil. Zool. 10. *p.* 36. 41. *tab.* 4. *f.* 9.

Reſembles the last: *capsules* with muricate tentacula, producing eggs at the baſe.

691. T. *campanulata.* Tentacula disposed in the form of a crescent: body projecting beyond the sheath: orifices of the sheath annulate: tube simple or palmate.

Nat. Miscell. t. 354. *Adams microſc. t.* 22. *f.* 32.

In stagnant waters, soft, transparent, incloſed in a bell-shaped case, the plume with about 60 tentacula.

692. T. *flabelliformis.* With fascicled parallel tubes disposed in separate radiate bundles.

Adams Linn. Tranſact. v. *p.* 12. *t.* 2. *f.* 12-14.

On the Conferva rubra, minute: stem cylindrical, a little dilated at the baſe, and becoming ſuddenly dilated into a compressed fan-shaped form, from which proceed 8 rays, each compoſed of ſeveral equal very minute cylindrical tubes.

77. CORALLINA. *Coralline.*

693. C. *auriculariæformis.* Stemless, spreading like a parasitical fungus, lobed, imbricate.

Sowerby Brit. Miscellany 1. *p* 119. *tab.* 56.

Found ſometimes incrusting other corallines, yellowish or reddish, in ſomewhat circular patches, ſmooth on both ſurfaces, with minute cells in tranſverſe rows.

694. C. *squamata.* Trichotomous; the joints of the stem roundly compressed and wedge-shaped, those of the branches flatly compressed, terminal-ones flattish and sharply 2-edged.

Ellis Corallines p. 49. *tab.* 24. *n.* 4. *f.* c. C.

On the Cornish coast, of a ſea-green colour.

695. C. *elongata.* Trichotomous; the joints of the stem roundish-wedge-shaped, those of the branches cylindrical, terminal-ones rather obtuse and some of them capitate.

Ellis Corallines p. 49. *tab.* 24. *n.* 3.

Coral reddish or purplish, very slender, drooping, longer and ſmaller than C. officinalis.

696. C. *officinalis.* Doubly pinnate or trichotomous; joints of the stem somewhat wedge-shaped or turbinate, those of the branches round, some of the terminal-ones capitate.

Ellis Corallines p. 48. *tab.* 24. *f.* a. A. *Nat. Misc. t.* 158.

Coral growing in clustered tufts, 2-5 inches long, about the thickness of a large thread, erect, white, greenish, yellowish, or purple, ſometimes a mixture of all the colours.

697. C. *rubens.* Dichotomous, filiform, flat-topped the joints of the stem round, those supporting the divisions clavate; some of the lower-ones 2-horned.

Ellis Corallines p. 50. *tab.* 24. *n.* 5. *f.* e. E.

About 2 inches long, red: terminal-joints notched.

698. C. *cristata.* Dichotomous, filiform, in crested tufts, with roundish joints, those supporting the last subdivisions clavate.

Ellis Corallines p. 51. *n.* 7. *tab.* 24. *f.* f. F.

About one or two inches long, diſpoſed in crest-like clusters, red, purple, white, green or yellowish; the lower-joints not horned, terminal-ones simple.

699. C. *spermophoros.* Dichotomous, filiform, with roundish joints; those supporting the 2 last subdivisions clavate, terminal-ones long, setaceous, in pairs.

Ellis Corallines p. 51. *n.* 8. *tab.* 24. *f.* g. G.

About an inch long, milk-white, and more looſe and ſpread than the last.

700. C. *corniculata.* Dichotomous, with the joints of the stem and branches 2-horned, those of the subdivisions roundish.

Ellis Corallines p. 50. *n.* 6. *tab.* 24. *f.* d. D.

Growing on Fuci, white, an Inch or two high.

701. C. *globifera.* Simple, or slightly forked, with cylindrical joints proceeding from a sphærical globule.

Ellis Corallines p. 51. *n.* 9. *tab.* 24. *f.* h. H.

Very ſmall, attached to Fuci, and may probably be the beginning of C. ſpermophoros.

78. SERTULARIA.

A. *Stem horny, tubular, fixed by the base, beset with cup-shaped denticles, and furnished with vesicles or ovaries, containing polypes, eggs, or the living young.*

702. S. *rosacea.* Panicled, with alternate branches: denticles opposite, tubular, truncate: vesicles crowned with spines.

Ellis Corallines p. 8. *tab.* 4. *Phil. Trans.* 48. *t.* 23. *f.* 5.

White, tender, growing on shells or creeping up other corallines; *vesicles* reſembling the blossom of the pomegranate.

703. S. *pumila.* Branches scattered: denticles opposite, seated on oval joints, pointed, recurved: vesicles obovate.

Ellis Corall. p. 9. *t.* 5. *n.* 8. *f.* a. A. *Phil. Trans.* 48. *t.* 23. *f.* 6. F. F.

On the leaves of Fuci, particularly the F. ſerratus.

704. S. *operculata.* Branches alternate: denticles opposite, pointed, nearly erect, with 2 bristles each side: vesicles obovate, covered with a lid.

Ellis Corallines p. 8. *tab.* 3. *n.* 6. *f.* b. B.

On Fuci and shells, about 5 inches long.

705. S. *tamarisca.* Branches alternate: denticles opposite, truncate and undulate at top: vesicles obovate, truncate, with a small tooth each side and a short tube in the centre.

Ellis Corallines p. 4. *tab.* 1. *n.* 1. *f.* a. A.

Stem nearly 4 inches long: *denticles* slightly 3-toothed.

706. S. *abietina.* Branches alternate: denticles nearly opposite, oval, swelling at the base on the upper-side: vesicles oval.

Ellis Corallines p. 4. *tab.* 1. *n.* 2. *f.* b. B.

About 5 inches long, and often covered with small Serpulæ: *branches* often alternately pinnate.

707. S. *nigra.* Blackish, pinnate; denticles nearly oppo-

site, minute: vesicles large, all on one side, square-oval.

Pall. el. Zooph. p. 136. *n.* 83.

On the Cornish coast, about 4 inches long.

708. S. *fuscescens.* Grey-brown, pinnate: denticles nearly opposite, tubular: vesicles numerous, minute, all on one side, with 3 tubercles on each.

Baster op. subs. 1. *tab.* 1. *fig.* 6.

On the Cornish-coast; reſembles the last.

709. S. *cupressina.* Panicled, very long: denticles nearly opposite, obliquely truncate and a little pointed: vesicles obovate, toothed each side.

Ellis Corallines p. 7. *tab.* 3. *n.* 5. *fig.* a. A.

Reſembles S. tamariſca, but the denticles are obliquely truncate, pointed, and not toothed or undulate on the top; and the central tube is shorter.

710. S. *argentea.* Panicled, with alternate branches: denticles nearly opposite, pointed: vesicles oval.

Ellis Corallines p. 6. *tab.* 2. *n.* 4. *f.* c. C.

Reſembles S. pumila, but the denticles are not recurved, or ſeated on oval joints, and the veſcicles are distinctly oval.

711. S. *rugosa.* Branches scattered: denticles alternate, obsolete: vesicles much wrinkled, 3-toothed at top.

Ellis Corallines p. 26. *tab.* 15. *n.* 23. *f.* a. A.

On the Flustra foliacea, and other Corallines: stem twisted.

712. S. *halecina.* Erect, alternately branched: denticles alternate, tubular, jointed: vesicles oval, united along the side to a small tubular stalk; stem composed of united tubes.

Ellis Corallines p. 17. *t.* 10. *Phil. Trans.* 48. *t.* 17. *f.* E. F. G.

Stem growing to 6 or 8 inches high, stiff, brittle when dry, consisting of numerous ſmall tubes growing nearly parallel to each other: *denticles* of two joints, cylindrical: *vesicles* oblong-oval, with a short tube at the top.

713. S. *Thuja.* Stem zigzag, naked at bottom, with a tuft of dichotomous branches at top: denticles alternate, on each side and closely appressed to the branches: vesicles obovate, with a rim at top.

Ellis Corallines p. 10. *tab.* 5. *n.* 9. *f.* b. B.

Stem erect, stiff, knotty, with a cloſe-ſet panicle at top: *vesicles* at the bottom of the branches, furnished with a lid.

714. S. *Myriophyllum.* Branches leaning one way: stem gibbous on the side opposite the branches: denticles appressed to the stem, all on the underside of the branches, truncate.

Ellis Coral. p. 14. *tab.* 8. *Soland. and Ellis Zooph. p.* 44. *n.* 13.

Stem about 3 inches long, pale horny, consisting of numerous united tubes, channelled and indented, with large protuberances opposite ſome of the branches: *denticles* ſeated in a ſocket, with a short ſpine on the lower part.

715. S. *falcata.* Stem flexuous, with alternate pinnate branches: denticles all on one side, imbricate, truncate: vesicles oblong-oval.

Ellis Corall. p. 12. *tab.* 7. *n.* 11. *f.* a. A.

About 3 inches long: denticles in a single row.

716. S. ***Pluma.*** **Branches alternate, pinnate, lanceolate: denticles all on one side, imbricate, campanulate, toothed at top: vesicles gibbous, toothed on the margin.**

Ellis Corallines p. 13. *tab.* 7. *n.* 12. *f.* b. B.

Climbing up Fuci: *branches* jointed, twisted: *denticles* supported in front by a ſmall hollow ſpine: *vesicles* with 4 or 5 oblique crested ribs.

717. S. *antennina.* **Stems simple or slightly branched: denticles whorled, in fours, setaceous: vesicles obliquely truncate, in whorls.**

Ellis Coral. p. 15. *tab.* 9. a. A.

Near a foot high, yellow, with very fine capillary yellowish radicles: *stems* ſurrounded at the joints with whorls of ſmall incurved bristles, on the upper-sides of which are rows of minute cup-shaped denticles: *vesicles* on short pedicels, obliquely open towards the stem, and placed round it at the insertion of the branches.

718. S. *verticillata.* **Branches alternate: denticles campanulate, toothed round the rim, on long twisted pedicels, and placed in fours round the stem: vesicles oval, ending in a tube.**

Ellis Corallines p. 23. *tab.* 13. *n.* 10. *f.* a. A,

Stem ribbed, looſely branched: *vesicles* nearly erect, glutinous.

719. S. *volubilis.* **Branches alternate: denticles campanulate, toothed round the rim, on long twisted pedicels, placed alternately: vesicles oval.**

Ellis t. 14. a. A. *Solander and Ellis n.* 22. *t.* 4. *f.* e. E. f, F.

Whitish, minute, climbing up other corallines; resembles the last, but the denticles are not placed in whorls, and the pedicles are longer and twisted round the stem: *vesicles* ſometimes wrinkled acroſs.

720. S. *Syringa.* **Branches filiform, alternate: denticles cylindrical, obliquely truncate at top, mostly alternate, on twisted pedicels shorter than the denticles.**

Ellis Corall. p. 27. *tab.* 14. *n.* 21. b. B.

On shells, or creeping up other corallines: *vesicles* unknown.

721. S. *Cuscuta.* **Branches opposite, simple: denticles obsolete: vesicles oval, axillary.**

Ellis Corall. p. 28. *t.* 14. *n.* 26. *f.* c C.

Climbing up Fuci: *vesicles* ſmall, axillary.

722. S. *pustulosa.* **Stem with alternate dichotomous branches, covered with prominent pustules with each a point in the middle.**

Ellis Corallines p. 54. *tab.* 27. *fig.* b, B.

Stem rising into alternate forked branches, with ſmall pustule-like denticles towards the tips, having a circular rim with a point in the middle of each.

723. S. *frutescens.* **Branches alternate, pinnate: denticles cylindrical, campanulate, placed in a single row on the inside of the branches.**

Soland. and Ellis Zooph. p. 55. *n.* 29. *t.* 6. *f.* a. A.

Stem hard, blackiſh, compoſed of ſmall united tubes: *branches* lanceolate, brown: *denticles* truncate, slightly pointed on one side.

724. S. *Filicula.* Stem zigzag, with alternate branches: denticles opposite, ovate, with a single erect one at the junctures of the branches: vesicles obovate, with a tube in the centre.

Soland. and Ellis Zooph. p. 57. *n.* 32. *tab.* 6. *f.* c. C.

Very tender, much branched; the branches nearly horizontal.

725. S. *Evansii.* Branches opposite: denticles short, opposite: vesicles lobed, arising from opposite branches, which proceed from the creeping adhering tube.

Soland. and Ellis Zooph p. 58. *n.* 44.

Creeping on Fuci, about 2 inches high, very slender, bright yellow: *vesicles* fulvous, with opposite lobes.

726. S. *muricata.* Stem jointed, interwoven at bottom: denticles pedicelled, proceeding alternately from the joints: vesicles pedicelled, oval, spinous.

Solander and Ellis Zooph. p. 59. *n.* 36. *tab.* 7. *f.* 3. 4.

Vesicles full of pointed ſpines from arched crested ribs.

727. S. *Uva.* Slightly branched, with alternate divisions: denticles obsolete: vesicles oval, closed, clustered.

Ellis Corallines. p. 27. *n.* 25. *tab.* 15. *f.* c. C.

Vescicles tranſparent, with a white nucleus.

728. S. *lendigera.* Stem and branches jointed: denticles cylindrical, truncate, in a single row along the branches and growing gradually less.

Ellis Corallines p. 27. *n.* 24. *tab.* 15. *f.* b. B.

Branches ſubdivided and irregularly interwoven: *denticles* placed in parallel ranks along the inside of the branches, and growing gradually shorter towards the tops of the joints: *vesicles* unknown.

729. S. *geniculata.* Stem branched, jointed, flexuous: denticles twisted, alternate, at the base of the vesicles: vesicles obovate, with a tube in the centre.

Ellis Corallines p. 22. *n.* 19. *tab.* 12 *f.* b. B.

Creeping up Fuci: *joints* clavate at top.

730. S. *dichotoma.* Stem dichotomous, flexuous, twisted at the joints: denticles campanulate, on annulate stalks: vesicles obovate, axillary, on twisted pedicels.

Ellis Coral. p. 21. *n.* 18. *tab.* 12. *f.* a. A. c. C.

Near a foot long, tough, pliant, white, but becoming testaceous by age.

731. S. *spinosa.* Branches forked, ending in spinous points: denticles distant, on the same side, obsolete: vesicles linear-oval.

Ellis Corallines p. 20. *n.* 17. *tab.* 11. *f.* b. d. B. C. D.

Stems compoſed of interwoven tubular fibres: *branches* flexuous, looſe, forked, with pointed tips.

732. S. *pinnata* Stem simple, lanceolate, pinnate: denticles campanulate, all on one side: vesicles oval, clustered, with a coronet of tubercles round the mouth.

Ellis. Corallines. p. 19. *n.* 16. *tab.* 11. *f.* a. A.

Stem about 3 inches high, alternately pinnate; *denticles* near together, ſemiorbicular.

733. S. *setacea.* Stem simple, oblong, pinnate: denticles obsolete, remote, along the upper-side of the branches: vesicles oblong, axillary.

Ellis Coral. t. 38. *f.* 4. *Shaw Nat. Miscell. t.* 71.

About half the size of the former: *branches* a little curved downwards: *vesicles* erect, tubular, at the angles of the branches.

734. S. *polyzonias.* Stem loosely branched: denticles alternate, ovate-oblong, undulate round the top: vesicles obovate, with concentric wrinkles.

Ellis Coral. p. 5. *n.* 3. *tab.* 2. *f.* a. A. b. B.

Stem erect or climbing, 3 or 4 inches long, pale yellow.

735. S. *Lichenastrum.* Stem simple, alternately pinnate: denticles alternate, obtuse, in 2 appressed rows along the stem and branches: vesicles oval, with a lid.

Ellis. Corall. p. 11. *n.* 10. *t.* 6. *Soland. and Ellis p.* 42. *n.* 10.

Stem erect, jointed, compressed: *branches* alternate, nearly horizontal.

736. S. *imbricata.* Stem slightly branched: denticles obsolete: vesicles oblong, slightly clavate, irregularly imbricate along the branches.

Adams Linn. Tranſact. v. *p.* 11. *tab.* 2. *f.* 5-11.

Stem cylindrical, about 3 inches high: *vesicles* placed in 2 rows along the ſmaller branches, but irregularly imbricate towards the tip.

B. *Stem crustaceous, inclining to stony, composed of rows of cellular denticles, without distinct vesicles, in the place of which are small globules.* Cellaria.

737. S. *Bursa.* Stem branched, dichotomous: denticles opposite, compressed, truncate, wedge form, with a small clavate tube at top.

Ellis. Corall. p. 41. *tab.* 22. *n.* 8. *f.* a. A.

Minute, flexible, tranſparent, adhering to Fuci: *denticles* carinate, appearing in pairs like the pods of the Shepherd's purſe.

738. S. *loriculata.* Branches erect, dichotomous: denticles opposite, obliquely truncate, nearly obsolete.

Ellis Corallines p. 40. *n.* 7. *tab.* 21. *f.* b. B.

Stem much branched: *denticles* opening obliquely.

739. S. *fastigiata.* Branches erect, forked, flat-topped: denticles alternate, pointed, with their opening on one side.

Ellis Corallines p. 33. *n.* 1. *tab.* 18,

Denticles with a black ſpot in the middle of the mouth.

740. S. *avicularia.* Branches forked: denticles pointing one way, with 2 mucronate beak-like appendages: globules sessile, mucronate.

Ellis Corallines p. 36. *n.* 2. *tab.* 20. *f.* a. A.

Denticles with 2 projections reſembling a bird's beak when open: *globules* testaceous, with a ſpine at the baſe.

741. S. *scruposa.* Branches forked, creeping: denticles alternate, angular, spinous.

Ellis Corallines p. 38. *n.* 4. *tab.* 20. *f.* c. C.

Very brittle, linear, pale, with a double row of cells, each with a pointed projecting angle on the out-side and opening obliquely.

742. S. *reptans.* Branches forked, creeping: denticles alternate, with 2 spines at top.

Ellis Corallines p. 37. *n.* 3. *tab.* 20. *f.* b. B.

Creeping on other corallines, hardly an inch long, white or greyish: *cells* like inverted cones, with oblique mouths.

743. S. *ciliata* Branches forked, erect: denticles alternate, ciliate round the mouth, funnel-form.

Ellis Corallines p. 38. *n.* 5. *tab.* 20. *f.* d. D.

Minute, whitish, with long briſtles at the mouth, which is ſometimes covered with a concave teſtaceous lid: *globules* like a birds head.

744. S. *eburnea.* Branches spreading: denticles alternate, truncate, a little prominent: vesicles oval, with a tubular beak on one side.

Ellis Corallines p. 39. *n.* 6. *tab.* 21. *f.* a. A.

About an inch high, white: *root* conſiſting of interwoven tubes: *denticles* cylindrical: *vesicles* brittle, dotted.

745. S. *cornuta.* Branches alternate: denticles opening one way, a little incurved, truncate, with a long bristle below the mouth of each: vesicles oval.

Ellis Corallines p. 42. *n.* 10. *tab.* 21. *f.* c. C.

Hardly 4 inches long, ſtony, clear white: *root* conſiſting of jointed tubes: *denticles* tapering to the baſe, a little incurved: *vesicles* dotted, with a short tubular neck on one side.

746. S. *loricata.* Branches alternate: denticles opening one way, with a raised margin round the mouth, at the base of which is a short spine.

Ellis Corallines p. 42. *n.* 9. *tab.* 22. f, b. B.

Denticles like inverted horns placed one over the other, opening on the inside, with a short briſtle on the lower-part of the mouth, and another at top in the terminal-ones.

747. S. *anguina.* Stem simple, without denticles, beset with quite simple alternate obtuse clavate tubes opening on one side.

Ellis Corallines p. 43. *n.* 11. *tab.* 22. *f.* c. C, D.

Climbing up marine substances, white, soft, flexible, varying in form: *tubes* testaceous, annulate, jointed in the middle. It appears to connect the Sertulariæ with the genus Hydra.

748. S. *ternata.* Branched, forked, jointed, creeping; joints somewhat top-shaped, angular at their sides, with 3 cells in the front of each.

Solander and Ellis Zooph. p. 30. *n.* 18.

On the shores of Scotland: stony, semitransparent.

79. PENNATULA. *Sea Pen.*

749. P. *phosphorea.* Stem fleshy, with a rough midrib, and imbricate ramifications.

Phil. Trans. 53. *tab.* 19. *f.* 1-5. *Nat. Miscell. tab.* 39.

About 4 inches long, red, emitting a strong phosphorescent light in the dark: *stem* villous, with a lanceolate rough midrib, and nearly incumbent rays, the tubes all pointing one way.

750. P. *mirabilis* Stem filiform, with a smooth midrib,

and lunate denticulate alternate ramifications growing smaller towards the bottom.

Sowerby Brit. Miſcell. i. *p.* 51. *tab.* 25.

Stem long, reddish-grey, ending at top in a bony substance, with very short ramifications.

80. HYDRA. *Polype.*

751. H. *viridis.* **Green, with about 10 arms shorter than the body.**

Adams and Kanm. Microſc. p. 364. *tab.* 21. *f.* 5.

In ſtagnant waters and slow ſtreams, generally on the under surface of aquatic plants, appearing like a tranſparent green jelly when contracted; when expanded it is a linear body, fixed at one end, and ſurrounded at the other by 8-10 tentacula or arms placed in a circle round the mouth, and gradually producing its young from the sides, which at first ſeem small protuberances, increasing in length, till they aſsume the form of the parent, and then dropping off. Like all its tribe, it has the power of reproducing parts which have been deſtroyed; and if cut or divided in any direction, each ſeparate part will become a perfect polype.

752. H. *grisea.* **Yellowish-grey, with about 7 arms longer than the body.**

Adams and Kanm. Microſc. p. 364. *tab.* 21. *f.* 6.

In rivulets and ſtagnant waters, tapering towards the baſe, with ſometimes 12 arms or tentacula.

753. H. *fusca.* **Grey-brown, with about 8 arms, many times as long as the body.**

Adams and Kanm. Microſc. p. 363. *tab.* 21. *f.* 7. 8.

In fresh waters, a little tapering to the baſe, with very fine ſetaceous and long tentacula or arms.

ORDER V. INFUSORIA.

81. BRACHIONUS.

754. Br. *urceolaris.* **Univalve, bell-shaped, with the shell many-toothed at top, and rounded at the base: tail long, cloven at the end.**

Adams Microſc. p. 568. *t.* 22. *f.* 36-38. *t.* 27. *f.* 56. 57.

Vorticella urceolaris. *Donovan Br. Ins. t.* 17. *f.* 1. 2.

In stagnant waters, appearing to the naked eye as a ſmall white ſpeck: rotatory organ double, which can be protruded or concealed at pleaſure.

755. Br. *striatus.* **Univalve, with an oval striate shell 6-toothed at top and entire at the base; without tail.**

Adams Microſc. p. 364. *tab.* 27. *fig.* 64. 65.

In ſalt water, tranſparent, crystalline, truncate on the fore-part and rounded behind: *shell* varying in form, with 12 longitudinal ribs.

756. Br. *Tripus.* **Bivalve, with the shell unarmed at the top and 3-horned at the base; tail double.**

Adams Microſc. p. 566. *tab.* 27. *f.* 59.

In waters which have been kept ſome time, very tranſparent and nearly triangular, with a double rotatory organ.

757. Br. *uncinatus.* Bivalve, with the shell unarmed and rounded at the tip, 1-toothed at the base; tail with 2 bristles.

Adams Microſc. p. 567. *tab.* 27. *f.* 55.

In ditch water: *shell* rounded and capable of being opened at both ends, armed with a hook on the fore-part: *tail* consisting of 4 or 5 joints.

758. Br. *mucronatus.* Bivalve, with the shell 2-toothed at the top and bottom; tail with a double spine.

Muller Verm. i. 1. *p.* 134. *n.* 145.

In stagnant water: *shell* crystalline, rather oblong, truncate at both ends: *tail* with moveable tranſparent ſpines: *rotatory-organ* mucronate in the middle.

759. Br. *calyciflorus.* Simple, calycled, with the shell crenate behind; upper-lip of the mouth 4-toothed.

Baker Microſc. p. 304. *tab.* 12. *f.* 4-6.

In putrid and fresh waters.

760. Br. *quadridentatus.* Shell inflated, 4-toothed at top; rotatory organ double; the base 2-horned; tail long, ending in 2 short points.

Adams and Kanm. Microſc. p. 569. *tab.* 27. *f.* 58.

In stagnant waters moving with great celerity, and often attaching itſelf to duckweed by means of its tail: *shell* very tranſparent,

761. Br. *Patina.* Shell orbicular, unarmed, entire, with a double rotatory organ, and short simple tail.

Vorticella circularis. *Shaw Nat. Miſ. t.* 199.

In stagnant waters abounding in aquatic plants.

82. VORTICELLA.

A. *Seated on a pedicel or stem.*

762. V. *Polypina.* Compound, bell-shaped, with a retortile much branched stem.

Adams Microſc. t. 27. *f.* 61. *Nat. Miſc. t.* 278.

In sea water, adhering to Fuci, appearing to the naked eye like a white point, and has a double ſpontaneous motion.

763. V. *anastatica.* Compound, bell-shaped, with an oblique mouth, and scaly rigid stem.

Adams Microſc. p. 397. *tab.* 21. *f.* 13-16.

In fresh waters, forming a cluster branching out in various directions: *ovaries* ſeated on the stems in the form of bulbs, which detach themselves from the stems, and fix themſelves to other substances, producing a new cluster.

764. V. *pyraria.* Compound, branched, with inversely conic naked florets, and 2 double tentacula.

Adams Microſc. p. 400. *tab.* 22. *f.* 25. 26.

In stagnant waters, long, ſetaceous, rigid, pellucid at the baſe, truncate at top, with 2 lateral arms each side.

765. V. *opercularia.* Compound, branched, with oval naked florets closed with a fringed lid.

Adams Microſc. p. 401. *tab.* 22. *f.* 29.

In stagnant waters: *stem* much branched, jointed.

766. V. *tuberosa.* Stem forked, with turbinate florets, each with 2 or 3 tubercles.

Baker Microſc. p. 350. *tab.* 13. *f.* 10-13.

In stagnant waters: rigid, with the tubercles of the florets convex and radiate.

767. V. *umbellaria.* Simple, globular, with blackish granulations, and a rigid stem.

Adams Microſc. p. 402. *tab.* 22. *f.* 30.

In stagnant waters, reſembling a ſpot of mould: *heads* yellowish, with diſtinct opake dots: *branches* forked: *clusters* flat-topped.

768. V. *berberina.* Simple, oval, with a branched rigid stem, and white granulations.

Adams Microſc. p. 406. *Roeſ. Inſ.* 3. *t.* 99.

In freſh water: *branches* tranſparent, and when clustered together appearing of a changeable violet colour.

769. V. *nebulifera.* Simple, oval, with a reflexile stem.

Adams Miſcroſc. p. 560. *tab.* 27. *f.* 66.

On the Conferva polymorpha, inviſible to the naked eye: *florets* narrow at the baſe, truncate and margined when open, oval when ſhut.

770. V. *Convallaria.* Simple, bell-shaped, with retortile stem.

Adams Microſc. t. 22. *f.* 39. *Nat. Miſc. tab.* 312.

In freſh waters, on other ſubſtances, appearing to the naked eye as ſo many white points: *stems* contracting ſuddenly in a ſpiral manner, and in a moment expanding themſelves again.

771. V. *lunaris.* Simple, hemisphærical, with a crescent-shaped aperture, and retortile stem.

Adams Micr. t. 27. *f.* 54. *Donovan Inſ. t.* 8. *f.* 1-3.

In stagnant waters: *floret* cup-ſhaped, with a protuberant margin ciliate each ſide with undulating hairs.

772. V. *citrina.* Simple, variously shaped, with a contractile mouth, and equal stem.

Adams Microſc. p. 558. *tab.* 27. *f.* 53.

In stagnant water: *head* large, tranſparent, with greenish-yellow ſpecks: *ſtem* curved.

B. *Furnished with a tail.*

773. V. *floſculoſa.* Clustered, oblong-oval, with a dilated pellucid disk.

Adams Microſcope p. 557. *t.* 27. *f.* 51. 52.

In fens, adhering to the Ceratophyllum, appearing to the naked eye like a yellow globule; *head* often drawn into the abdomen, exhibiting a broad kidney-ſhaped disk; *abdomen* oblong-oval, tranſparent, with a few black ſpecks: *tail* very ſharp, twice as long as the abdomen, ſmooth, or rugged with annulations.

774. V. *socialis.* Clustered, clavate, with an oblique disk and rough surface.

Hydra ſocialis. *Adams Microſc. p.* 395. *t.* 21. *f.* 11.

In ditches, growing in clusters on the Ceratophyllum, and united by their ſmall thin tails to a common centre: *head* ſometimes contracting into an almost globular form.

775. V. *stentorea.* Simple, trumpet-shaped, with a ciliate margin.

Hydra stentorea. *Adams Microſc. p.* 392. *t.* 22. *f.* 27. 28.

In freſh waters, adhering ſingly by their ſhort tail, and elongated into a trumpet-ſhaped tube, white, green, or blue, tranſparent.

776. V. *hyacinthina.* Simple, furnished with an involucre, the border of the mouth many-toothed.

Baker Microſc. p. 302. *tab.* 12. *f.* 2.

Scattered, oblong, tapering into a tail.

777. V. *Catulus*. Cylindrical, with a plain aperture, and reflected cloven tail.

Adams Microſc. p. 325. *tab.* 27. *f.* 50.

In marshy waters, thick, muſcular, variously folded: *head* connected by a short neck: *tail* short, ending in 2 short bristles, and exſerted or concealed at pleaſure: *rotatory-organ* very minute.

778. V. *macroura*. With a double rotatory organ, and slender tail ending in a triple spine.

Baker Microſc. p. 380. *tab.* 12. *f.* 1.

In marshy waters; reſembles V. rotatoria, but is entirely tranſparent.

779. V. *rotatoria*. Cylindrical, with a double rotatory organ, and long tail furnished with 4 points.

Adams Microſc. p. 548. *t.* 26. *f.* 1-3. 6. 7. 11--23. *t.* 27. *f.* 46-49.

In stagnant waters, appearing to the naked eye like a yellowish dot, and in rain water which has stood some time in gutters and cisterns; it frequently changes its form and posture, from a long taper body to a short broad flat one; the rotatory organs turn like wheels with considerable velocity: *tail* consisting of about 3 retractile joints, and terminated by 4 minute hooks.

780. V. *lacinulata*. Inversely conic, with the aperture lobed: tail furnished with 2 small bristles.

Adams Microſc. p. 547. *tab.* 27. *f.* 45.

In pure water, transparent, cylindrical, with molecular intestines: moving with velocity in an oblique direction.

C. *Without stem or tail.*

781. V. *Ampulla*. Contained in a bottle-shaped pellucid bag: head divided into 2 lobes.

Adams Microſc. p. 544. *tab.* 26. *f.* 4. 5.

Bag in the shape of a common water-bottle, in which the animalcule is placed, sometimes at the bottom, sometimes nearly filling it.

782. V. *cratægaria*. Subglobular, clustered, and sometimes united by a very minute stem or tail.

Adams Microſc. p. 400. *tab.* 22. *f.* 49.

Found in muddy waters in the month of April, generally heaped together in a sphærical form, and often united by a common stalk.

783. V. *nasuta*. Cylindrical, with a projecting point in the middle of the mouth.

Adams t. 27. *f.* 38. 39. *Donov. Inſ.* i. *t.* 29. *f.* 2.

In stagnant waters, invisible to the naked eye, transparent, quick in motion, and perpetually changing its form, rounded at the baſe, hairy at the mouth each side: *rotatory-organ* surrounding the middle of the body.

784. V. *crateriformis*. Nearly square, with ciliate tufts behind.

Adams Microſc. p. 543. *tab.* 27. *f.* 40. 41.

Common in infuſions of graſs, very vivacious and pellucid, with the internal molecules easily seen, round, longer than it is broad, with the sides convex.

785. V. *truncatella*. Cylindrical, truncate at top with short crowded fringe.

Hill Hist. anim. p. 6. *tab.* 1.

In freſh water, transparent, full of blackish molecules, obtuse at the baſe, the margin of the mouth entirely surrounded with fringe.

786. V. *limacina.* Cylindrical, truncate, with 2 pairs of rotatory organs.
Adams Microſc. p. 543. *tab.* 27. *f.* 60.
In stagnant waters, about the mouths and feelers of testaceous animals, transparent, invisible to the naked eye.

787. V. *discina.* Orbicular, with a ciliate margin and a kind of convex handle on the hind part.
Adams Microſc. p. 542. *tab.* 26. *f.* 8-10.

788. V. *cincta.* Trapeziform, blackish-green, opake.
Adams Microſc. p. 539. *tab.* 27. *f.* 30.
In marſhes, invisible to the naked eye, ſometimes oval and appearing as if surrounded with a tranſverſe keel in the middle, ciliate on all sides.

789. V. *polymorpha.* Of many forms, green, opake, granulous.
Adams Microſc. p. 539. *tab.* 27. *f.* 33-35.
Appears to the naked eye like a green point, moving with great agility, and perpetually changing into a variety of forms: *body* granulous.

790. V. *viridis.* Cylindrical, uniform, green, opake.
Donov, Ins. t. 39. *f.* 3. *Adams Micr. t.* 27. *f.* 31.
In fresh water, appearing to the naked eye like a green point, moving circularly or in a straight direction, obtuse at both extremities.

791. V. *bursata.* Green, with a truncate mouth and central papillary projection.
Adams Microſc. p. 537. *tab* 27. *f.* 32.
In salt water, round, prominent, filled with molecules.

792. V. *nigra.* Top-shaped, black.
Donov. Ins. t. 26. *f.* 3. *Adams Microsc. t.* 27 *f.* 36. 37.
In water which has stagnated on meadows, appearing to the naked eye like a black speck: *body* conical, opake, obtuse at one end, pointed at the other.

83. TRICHODA.

A. *Hairy.*

793. Tr. *Cometa.* Sphærical, hairy on the fore-part, with an appendant globule or two behind.
Donovan Ins. t. 26. *f.* 1. *Adams Micr. t.* 25. *f.* 46. 47.
In pure water: a pellucid globule with bright molecules, and furnished with an appendant lesser globule or two behind.

794. Tr. *granata.* Sphaerical, with an opake centre, hairy round the periphery.
Adams Micr. p. 507. *tab.* 25. *f.* 48.
In ſtagnant waters: an opake globule, with a pellucid margin surrounded with short hairs.

795. Tr. *Sol.* Globular, every where radiate with short hairs.
Adams Microſc. t. 25. *f.* 65, 66. *Nat. Misc. t.* 453.
In water which has been kept some time: *body* round, crystalline, dilatable and contractile, full of molecules, and beset with numerous divergent rays of hairs longer than the diameter of the body.

796Tr. *Bomba.* Changeable, pellucid, yellowish, with a few dispersed hairs on the fore-part.
Adams Micr. p. 509. *tab.* 25. *f.* 67. 68.

In stagnant water, yellowish with paler molecules, moving with velocity, and assuming various shapes.

797. Tr. *trigona*. Convex-conic, ciliate on the fore-part, lobed behind.

Adams Micr. p. 510. *tab.* 25. *f.* 63.

In fresh water; triangular, convex on both sides.

798. Tr. *pubes*. Oval-oblong, gibbous, depressed on the fore-part.

Adams Micr. p. 511. *tab.* 25. *f.* 61, 62.

In clear water: *body* rounded behind, the fore-part with a thick short dilatable neck furnished with extremely short hairs.

799. Tr. *Proteus*. Oval, obtuse behind, with a long contractile neck.

Adams Micr. p. 512. *tab.* 25. *f.* 56-60.

In animal and vegetable infusions, aſsuming a great variety of shapes, from orbicular to nearly linear, but generally elliptical, pointed at one end, with a long neck ending in a knob at the other.

800. Tr. *gibba*. Oblong, gibbous in the middle and on the back, both ends obtuse, hairy on the fore-part.

Adams Micr. p. 513. *tab.* 25. *f.* 55.

Body pellucid, with numerous obscure molecules.

801. Tr. *patens*. Long, round, with an oblong aperture on the fore-part, the edges of which are ciliate.

Adams Micr. p. 514. *tab.* 25. *f.* 54.

In salt water: *body* long, cylindrical, a little taper at the ends, and filled with molecules.

802. Tr. *Uvula*. Flattish, elongated, of unequal size, hairy on the fore-part.

Donov. Ins. t. 8. *f.* 4. *Adams Micr. t.* 25. *f.* 53.

In vegetable infusions; long, flat, flexuous, nearly of equal size, filled with blackish molecules and lucid globules near the middle.

803. Tr. *Anas*. Elongated, clavate, hairy underneath at the top of the neck.

Adams Micr. p. 518. *tab.* 25. *f.* 49.

In pure water; ſmooth, filled with darker molecules.

804. Tr. *Farcimen*. Long, thick, surrounded with small bristles.

Adams Micr. p. 518. *tab.* 25. *f.* 50-52.

Body round, pellucid, thicker at one end, covered with lucid vesicles.

805. Tr. *Linter*. Oval, oblong, a little prominent at each end.

Adams Micr. p. 519. *tab.* 25. *f.* 51.

In infusions of graſs; varying in shape, with sometimes a rotatory motion.

806. Tr. *vermicularis*. Cylindrical, clavate, with a short hairy neck.

Donov. Ins. t. 17. *f.* 3. *Adams Micr. t.* 27. *f.* 1. a-e.

In river water; gelatinous, dilating and contracting itself, pellucid before, filled with molecules behind.

807. Tr. *Melitæa*. Oblong, ciliate, with a dilatable neck globular at the end and surrounded with hairs.

Donovan Ins. t. 29. *f.* 1. *Adams Microſc. t.* 27. *f.* 13.

In salt water : *body* larger on the hind-part.

808. Tr. *fimbriata.* Obovate, hairy at the tip, obliquely truncate and serrate on the hind-part.
Adams Micr. p. 520. *tab.* 27. *f.* 2.
Body pellucid, filled with small molecules.

809. Tr. *Rattus.* Oblong, carinate, hairy on the fore-part, with a very long bristle behind.
Adams Micr. p. 521. *tab.* 27. *f* 4.
In stagnant waters; the intestines visible in a gibbosity on the back.

810. Tr. *innata.* Sheathed in a cylindrical bag, with a small pedicel projectile beyond it.
Adams Micr. p. 526. *tab.* 27. *f.* 11.
In salt water ; funnel-form, contractile.

811. Tr. *Cyclidium.* Oval, gaping at the tip, hairy at the base.
Adams Micr. p. 527. *tab.* 27. *f.* 15.
In vegetable infusions ; pellucid, filled with globules on the hind-part.

812. Tr. *Pulex.* Oval, with an incision on the fore-part, hairy on the front and base.
Adams Micr. p. 527. *tab.* 27. *f.* 12.
In fresh water ; erect, a little convex, pellucid, filled with dark molecules, obtuſe in front with a few ſcattered hairs.

813. Tr. *Lynceus.* Nearly square, with a hooked beak and hairy mouth.
Adams Micr. p. 528. *tab.* 27. *f.* 16.
In water which has been kept some time, membranaceous, compreſsed, with the intestines eminently visible.

814. Tr. *Charon.* Boat-shaped, grooved, hairy at both ends.
Adams Micr. p. 529. *tab.* 27. *f.* 17. 18.
In sea water ; oval, hollowed on the upper-part, convex and furrowed beneath.

815. Tr. *Cimex.* Oval, with a lucid margin, hairy before and behind.
Adams Micr. p. 529. *tab.* 27. *f.* 19.
In vegetable infusions ; convex on the back, flat beneath, with an incision on the margin in front.

816. Tr. *Pocillum.* Oblong, truncate and hairy before, with a jointed tail divided into 2 bristles.
Donov. Ins. tab. 14. *Adams Micr. t.* 17. *f.* 5. 6.
In marshes ; cylindrical, margined : *mouth* when closed appearing terminated by 2 spines: *tail* with 2 pair of bristles, one on the second joint, the other on the last.

817. Tr. *Musculus.* Oval, hairy on the fore-part, with a projecting tail beneath on the hind-part.
Adams Micr. p. 523. *tab.* 27. *f.* 7.
In old infusions of hay ; smooth, with a double margin or line beneath, narrow and furnished with short hairs before, and a small pointed tail beneath on the hind-part.

818. Tr. *Delphinus.* Oblong, hairy on the fore-part, ending behind in a reflected truncate tail.
Adams Micr. p. 526. *tab.* 27. *f.* 8.
In infusions of hay ; smooth, pellucid, egg-shaped.

819. Tr. *Piscis.* Oblong, hairy before, ending behind a very fine slender tail.

Adams Micr. p. 525. *tab.* 27. *f.* 13. 14.
In water kept some time; smooth, pellucid, longer than it is broad, filled with yellow molecules, obtuse in front.

820. Tr. *longicauda.* Cylindrical, truncate and surrounded with hairs in front, tail long, with 2 points and 2 bristles.
Adams Microſcope. p. 525. *tab.* 27. *f.* 10.

B. *furnished with cirri.*

821. Tr. *Acarus.* Round, tumid, cirrate behind, pointed before.
Adams Microſcope p. 534. *tab.* 27. *f.* 27.
In fresh water; pear-shaped, full of black molecules, the tip pellucid and radiate with 4 long curved ſoft tendrils.

822. Tr. *Ludio.* Gibbous, cirrate on one edge and hairy on the other; tail forked stretched forward.
Donovan Ins. t. 20. *f.* 2. *Adams Microſcope t.* 27. *f.* 26.
In stagnant water; ſmooth, pellucid, clavate, full of ſmall points; *cirri* placed at top and in the middle.

C. *Horned.*

823. Tr. *Histrio.* Oblong, with mucronate points on the fore-part, and longitudinal fin-like bristles behind.
Adams Microſcope p. 531. *tab.* 27. *f.* 20.
Body membranous, pellucid, with 4 or 5 black points on the fore-part, the middle with cloſe black ſpecks and a few large white ſpots; near the lower-part a few longitudinal bristles, not reaching beyond the body.

824. Tr. *Cypris.* Pear-shaped, sinuate towards the hind-part, hairy on the fore-part.
Adams Microſcope p. 531. *tab.* 27. *f.* 21.
In ditch water; compreſsed, rounded behind.

825. Tr. *Patella.* Covered with an univalve shell, emarginate and horned in front, with pendulous flexile bristles behind.
Adams Misroſcope p. 531. *tab.* 27. *f.* 22. 23.
In marsh water; compreſsed, rounded behind.

826. Tr. *Pullaster.* Oval, sinuate on the fore-part with a crest in front, hairy at the base.
Adams Microſcope p. 532. *tab.* 27. *f.* 24. 25.
In ditches; pellucid with shining molecules, truncate and ſurrounded with hair in front, sinuous on the fore-part.

827. Tr. *Mytilus.* Oblong, broader at each extremity; transparent, ciliate and horned.
Adams Microſcope p. 532. *tab.* 27. *f.* 29.
In marsh water, pellucid, white and rounded at both ends, dark in the middle with black inteſtines mixed with a few white molecules, ciliate and armed with 2 horns in front, ciliate behind and furnished with 2 briſtles reaching beyond the margin.

84. CERCARIA.

828. C. *Gyrinus.* Round, with a sharp-pointed tail.
Baker Microſc. expl. tab. 10. *f.* 1?
In animal infusions; white, gelatinous, nearly globular on the fore-part.

829. C. *inquieta.* Changeable, convex, with a smooth tail.

Adams Microſcope p. 493. *tab.* 25. *f.* 31.

In ſalt-water; white, gelatinous, changing its shape into a ſphærical long or oval figure, but always preſerving its tail.

830. C. *Lemna.* Changeable, somewhat flattened, with an annulate tail.

Adams Microſc. p. 494. *tab.* 25. *f.* 33-35.

In ditch water; changing to oblong, triangular, or kidney-form; *tail* short, thick, annulate, or long, flexile, without rings.

831. C. *Turbo.* Globular, contracted in the middle, with a setaceous tail.

Adams Microſcope p. 494. *tab.* 25. *f.* 30.

Body pellucid, partly oval, partly ſphærical, appearing compoſed of 2 unequal globular bodies: *tail* ſometimes straight, ſometimes reflected.

832. C. *Podura.* Cylindrical, taper, pointed and slightly cloven behind.

Adams Microſcope p. 494. *tab.* 25. *f.* 36. 37.

In marshy places; pellucid, with black molecules on the trunk: head rounded, with a contraction a little below it.

833. C. *mutabilis.* Changeable, cylindrical, red or green, with a pointed slightly cloven tail.

Shaw Naturaliſt's Miſcellany tab. 107.

In stagnant pools, in ſuch innumerable myriads as to cover the whole surface with a sheet of green or red, giving it sometimes the appearance of being tinged with blood; varies its posture from a long cylindrical body, larger in the middle, to a nearly globular one: the extremities are pellucid.

834. C. *Lupus.* Cylindrical, thick, elongated, the tail ending in 2 spines.

Adams Micr. p. 497. *tab.* 25. *f.* 39.

In stagnant water: *head* truncate, divided from the body by a contraction: *tail* much narrower than the body, ending in 2 bright moveable ſpines.

835. C. *vermicularis.* Cylindrical, annulate, with an exsertile proboscis, and forked tail.

Adams Microſcope p. 497. *tab.* 25. *f.* 40.

In stagnant water; divided into 8 or 9 annulations, tapering towards the tail, the tip either obtuſe or lunate.

836. C. *Tripus.* Nearly triangular, with a pointed reflected arm each side, and straight tail.

Adams Microſcope p. 498. *tab.* 25. *f.* 38.

In ſalt water: *body* flat, pellucid.

85. LEUCOPHRA.

837. L. *Conflictor.* Sphærical, subopake, with moveable intestines.

Baker employm. Mic. *tab.* 3. *n.* 3.

In clear water; yellowiſh with dark edges, and filled with most minute molecules in continual violent agitation

838. L. *vesiculifera.* Oval, with vesicular intestines.

Adams Micr. p. 502. *tab.* 25. *f.* 41.

Body pellucid, with a dark grey edge, the middle frequently appearing of a blue cast.

839. L. *cornuta.* Inversely conic, green, opake.
Adams Microſcope p. 506. *tab.* 25. *f.* 42. 43.
In marshy grounds; broad and truncate in front, with a small spine each side, pellucid and pointed behind: sometimes it appears oval or kidney-shaped, and when the water which contains it evaporates, it breaks into molecular vesicles.

840. L. *heteroclita.* Cylindrical, obtuse in front, furnished behind with a double crested exsertile organ.
Adams Micr. p. 506. *tab.* 25. *f.* 44. 45.
To the naked eye appearing as a white point; intestines visible.

86. BURSARIA.

841. B. *Hirundinella.* Oval, pointed at each end, with a sharp fin each side.
Donovan Ins. t. 5. *f.* 2. *Adams Micr. t.* 25. *f.* 19.
In ditch and marsh water: a pellucid hollow membrane, moving forwards like a bird in flight.

842. B. *duplella.* Elliptic, with the edges folded over, leaving a narrow longitudinal hollow.
Adams Microſcope p. 492. *t.* 25. *f.* 18.
Among Duck-weed, without visible intestines.

87. GONIUM.

843. G. *pectorale.* Quadrangular, pellucid, with 16 sphærical molecules.
Adams Microſcope p. 489. *t.* 25. *f.* 17.
In pure water: *molecules* oval, nearly equal in size, ſet in a quadrangular membrane like diamonds in a ring, the lower-ones a little larger than the rest.

88. COLPODA.

844. C. *Meleagris.* Changeable, with the fore-part hooked, the hind-part folded up.
Donov. Ins. t. 32. *f.* 2. *Adams Micr. t.* 25. *f.* 22.
In water impregnated with vegetables: *membrane* dilated, finely folded, variously bent every moment; the fore-part clear and bright, the hind-part variously plaited and full of molecules; the margin sinuate.

845. C. *Cucullus.* Oval, inflated, with an incision beneath the tip.
Adams micr. p. 487. *tab.* 25. *f.* 23.
In various vegetable infusions: pellucid, with an irregular margin, filled with bright molecules; generally oval, with the top bent into a kind of beak, sometimes oblong but usually obtuse, with 8--24 bright molecules

846. C. *Pyrum.* Convex, oval, produced in front into a beak
Adams Micr. p. 489, *tab.* 25. *f.* 20. 21.
Body uniform, transparent, pale, filled with molecules; the neck rather long and a little bent.

89. PARAMECIUM.

847. P. *Aurelia.* Compressed, longitudinally plaited towards the fore-part, acute behind.
Hill Anim. 1. *t.* 3. *Herman. Naturf.* 20. *t.* 3. *f.* 41. a.
In ditch-water and infusions; membranaceous, 4 times as long

as it is broad; the fore-part obtuſe, hyaline; the hind-part filled with molecules; the fold reaching from the middle to the tip.

848. P. *Chrysalis.* Cylindrical, longitudinally plaited on the fore-part, obtuse behind.
Adams Microſcope p. 483. *tab.* 25. *f.* 26.
In ſalt water; reſembling the laſt, but is more obtuſe behind; the margins filled with black globules.

849. P. *oviferum.* Depressed, with large oval molecules within.
Adams Microſcope p. 483. *tab.* 25, *f.* 25.
Body oval, pellucid, with black grains.

850. P. *marginatum.* Depressed, grey, with a double margin.
Adams Microſcope p. 483. *tab.* 25. *f.* 24.
Body flat, elliptical, with a clear ſpiral intestine.

90. CYCLIDIUM.

851. C. *Bulla.* Orbicular, transparent.
Hill Anim. t. 1. 2. *Wrisb. infus. f.* 1. *b.*
In infusions of hay; pellucid, white, with the edges a little darker: motion slow and circular.

852. C. *radians.* Oval, with distinctly visible intestines.
Hill Hist. anim. tab. 1. *f.* 3.
In vegetable infusions; ſmooth, pellucid, with a blue canal within branching into 2 arms, and 2 tranſverſe lines just beneath the middle of the body.

853. C. *Nucleus.* Oval, ending in a point behind.
Hill Hist. anim. tab. 1. *f.* 4?
In vegetable infusions, reſembling a grape-ſeed; intestines visible, the fore and hind-part dark each side.

854. C. *Pediculus.* Oval, convex above, flat beneath.
Trembley Polyp. 1. *p.* 282. *tab.* 7. *f.* 10. 11.
On the arms of the Hydra fuſca: gelatinous, whitish, each end depreſsed and truncate, ſometimes cloven at one end.

91. VIBRIO.

855. V. *Lunula.* Bow-shaped, pointed at each end.
Adams Microſcope p. 458. *tab.* 25. *f.* 16.
Body green, with a few globules diſpoſed longitudinally.

856. V. *Serpentula.* Of an equal size, rather pointed at the ends.
Hill Anim. t. 1. *Spallanz. Microſc. p.* 189. *f.* 2. 12.
In vegetable infusions of several weeks standing; whitish, frequently convolute and drawn into various forms, marked with a longitudinal row of white dots.

857. V. *Aceti.* Rather rigid, with a tapering pointed tail, and a retractile protuberance at the base.
Adams micr. t. 11. *f.* 7. *Bak. Micr. t.* 10. *f.* 8. 9.
In vinegar and other mild acids; very fertile, pellucid, and active; is both viviparous and oviparous.

858. V. *Glutinis.* Filiform, with a dark shield on the back surrounded with a white ring: head obtuse.
Adams Micr. p. 462. *tab.* 11. *f.* 6. 8. 9. 10.

In paste and other viscid substances which have been kept some time; resembles the last, but is much slower, shorter, and less pointed at the tail.

859. V. *Anguilula.* Somewhat rigid, tapering both ways.

Adams Micr. t. 11. *f.* 4. 5. *Nat. Miscell. t.* 431.

In paste, vegetable sediments, and infusions of grain, and in sea water; pellucid, with hardly visible intestines, but sometimes a transverse line in the middle, and rarely a longitudinal row of globules: it is oviparous.

860. V. *Anser.* Elliptic, with a long neck, and a tubercle on the back.

Adams Micr. p. 477. *tab.* 25. *f.* 27. 29.

In water where Duck-weed grows; elliptic, round, full of molecules, produced into a bending neck longer than the body on the fore-part, sharp and bright behind.

861. V. *Olor.* Elliptical, with a very long neck clavate at the end.

Donov. Ins. t. 23. *f.* 1. *Adams Micr. t.* 25. *f.* 28.

In water replete with decayed vegetables; membranaceous, dilatable, continually moving the neck, somewhat pointed behind.

862. V. *Proteus.* Gelatinous, shooting out into a fine point.

Donovan Ins. t. 32. *f.* 3. 4. *Adams Microſc. t.* 25. *f.* 4. 5.

In river water, pellucid, filled with black molecules, changing its form continually, but always ending in a point.

92. BACILLARIA.

63. *Paradoxa* Bacillaria.

Adams Microſcope t. 25. *f.* 13-15. *Nat. Miſcell. t.* 436.

On the Ulva latiſsima: *body* compoſed of 5-40 linear yellowish short filaments united together, forming themſelves into a ſquare, zigzag, or extended line, but always preserving their paralleliſm and resting in a ſquare.

93. ENCHELIS

864. E. *punctifera.* Green, subcylindrical, obtuse before, pointed behind.

Adams Micr. p. 443. *tab.* 25. *f.* 8.

In marshes; opake, with a pellucid spot containing 2 black dots on the fore-part, and a double dark band in the middle.

865. E. *caudata.* Elongated, obtuse before, tapering to a tail behind.

Adams Microsc. p. 447. *tab.* 25. *f.* 9.

Body grey, pellucid, covered with globular molecules, obtuse before, tapering to a transparent tail behind.

866. E. *retrograda.* Transparent, narrowed before, with a globular tip.

Adams Micr. p. 448. *tab.* 25. *f.* 11. 12.

Gelatinous, without visible inteſtines, moving sideways, and ſometimes retrograde,

867. E. *Truncus.* Cylindrical, with a dilated round head.

Adams Micr. p. 450. *tab.* 25. *f.* 10.

Body large, mucous, grey, rather opake, globular in front, obtuſe behind, with sometimes 3 teeth protruded from the middle on one ſide, filled with globules: motion ſlow, from right to left.

94. VOLVOX.

868. V. *Sphærula.* Sphærical, with similar round molecules.

Adams Micr. p. 439. *tab.* 25. *f.* 6.

In ſtagnant waters; compoſed of about 60 pellucid homogeneous white or greeniſh-yellow points; moves ſlowly, about a quarter of a circle from right to left, and then back again from left to right.

869. V. *Lunula.* Hemisphaerical, with similar crescent-shaped molecules.

Adams Micr. p. 439. *tab.* 25. *f.* 7.

In marſh water; compoſed of numerous pellucid lunate homogeneous molecules, and has a double motion, that of the whole maſs turning ſlowly round, and of the molecules one among the other.

870. V. *Globator.* Sphaerical, membranaceous, with variously sized homogeneous molecules.

Natur. Miſc. t. 427. *Baker Micr. t.* 12. *f.* 27.

In ſtagnant water and vegetable infuſions: *body* green or yellow, moving ſlowly round its axis in all directions; a pellucid membrane covered with ſmaller and larger molecules, and theſe provided with a ſtill ſmaller molecular progeny, containing within itſelf a tribe of already impregnated deſcendants.

95. MONAS.

871. M. *Atomus.* Whitish, with a variable point.

Adams Micr. p. 431. *tab.* 25. *f.* 1.

In ſea water kept a long time: *body* a white point, ſomewhat oval, with a minute black dot variable in its poſture, rarely with 2.

872. M. *Punctum.* A solid opake black point.

Adams Micr. p. 431. *n.* 3.

In fetid infuſions of pears: *body* round, moving in a ſlow wavering manner.

873. M. *Mica.* Transparent, with an oval moveble circle in the middle.

Adams Micr. p. 433. *n.* 6.

Common in purer waters: *body* a lucid point, variable in its motions, and encompaſſed by a beautiful halo,

874. M. *Lens.* Transparent, with sometimes a greenish margin.

Baker Micr. t. 10. *f.* 1-3. *Hill. Anim. t.* i. 1.

Found in all water; a round pellucid dot, frequently in maſſes, without the leaſt veſtige of inteſtines.

875. M. *Termo.* A most minute simple gelatinous transparent point.

Adams Micr. p. 430. *n.* 1.

In moſt animal and vegetable infuſions; of all known animals the moſt minute and ſimple, being ſo extremely delicate and tranſparent, as often to elude the moſt highly magnifying powers, blending as it were in the water in which it ſwims.

INDEX.

INDEX.

Page
Aberdevine 40
Acipenſer 114
Acorn-Shell 143
Actinia 130
Alauda 41
Alca 66
Alcedo 34
Alcyonium 207
Ammodites 87
Ampelis 36
Amphitrite 136
Anarichas 87
Anas 71
Anchovy 107
Angler 115
Anguilla 87
Anguis 81
Anomia 162
Aphrodita 136
Aplysia 133
Arca. *Ark-shell* 160
Ardea 52
Argentina 105
Argentine 105
Ascarides 125
Aſcaris 125
Aſcidia 132
Ass 15
Aſterias 139
Atherina 105
Atherine 105
Auk 66
Avocet 66

B.

Bacillaria 229
Badger 10
Balæna 15
Balanus 143
Band-fish 94
Banistikle 101
Barbel 170

Page
Baſse 103
Bat 8
Bear 10
Beaver 11
Bee-eater 34
Bernacle 72. 144
Bib 90
Bittern 53
Blackbird 36
Black-cap 45
Bleak 109
Blennius 92
Blenny 92
Blind-worm 81
Bos 14
Brachionus 218
Brambling 40
Bream 108
Brill 97
Buccinum 171
Bulfinch 38
Bull 14
Bulla 168
Bull-head 94
Bunting 38
Burbot 91
Burſaria 227
Bustard 52
Butcher-bird 30
Buzzard 25

C.

Cachalot 16
Callionymus 88
Canis 9
Capra 14
Caprimulgus 49
Cardium 152
Carp 107
Caſtor 11
Cat 2

U 2

Page

Cellepora 205
Cellepore 205
Centriſcus 117
Cephalus 116
Cepola 94
Cercaria 225
Certhia 34
Cervus 13
Chaffinch 39
Chama 160
Charadrius 62
Charr 104
Chatterer 36
Chimæra 114
Chiton 143
Chough 31
Chub 109
Clupea 106
Coal-fiſh 91
Cobitis 103
Coch of the Woods . . . 50
Cockle 152
Cod-fiſh 89
Colpoda 227
Coluber 80
Columba 49
Coly 100
Colymbus 67
Comber 99
Conger 87
Cook 99
Coot 64
Coracias 31
Coral 206
Corallina 211
Coralline 211
Corvorant 77
Corvus 30
Cottus 94
Courser 62
Cow 14
Cowry 167
Crake 63
Crane 53
Creeper 34
Croſs-bill 37
Crow 30
Crusian 108
Cuculus 32
Cuckow 32
Curlew 55

Page

Curſorius 62
Curwillet 62
Cuttle-fiſh 138
Cyclopterus 115
Cyclidium 228
Cypræa 167
Cyprinus 107

D.

Dab 96
Dab-chick 65
Dace 109
Dead Man's Hand . . 207
Deer 13
Delphinus 17
Dentalium 198
Derris 132
Dew-worm 128
Didapper 65
Diver 67
Dog 9
Dog-fiſh 114
Dolphin 17
Donax 156
Doree 95
Doris 133
Dormouſe 13
Dorſe 89
Dottrel . . . 61. 62
Dove 49
Dragonet 88
Duck 71
Dun-diver 71
Dunlin 61

E.

Eagle 24
Earth-worm 128
Echineis 94
Echinorinchus 126
Echinus 141
Eel 87
Egret 54
Emberiza 38
Enchelis 229
Equus 14
Erinaceus 11
Ermine 10
Eſox 105
Exocœtus 106

Page

F.

Falco. *Falcon* 24
Faſciola 126
Father-lasher 95
Felis 9
Field-fare 36
Filaria 126
Finch 39
Fin-fish 15
Fire-flaire 112
Fitchet 10
Flat-fish 95
Flounder 96
Fluke 126
Flustra 209
Fly-catcher 41
Flying-fish 106
Fox 9
Fringilla 39
Frog 80
Frog fish 115
Fulica 64

G.

Gadus 89
Gadwall 74
Gallinula 63
Gallinule 63
Gambet 58
Gannet 77
Garganey 76
Gar-fish 105
Gaſteroſteus 101
Gaſtrobranchus 110
Gattorugine 92
Gilt-head 97
Goat 14
Goat-sucker 49
Gobius. *Goby* 94
Godwit 56
Golden-eye 76
Gold-finch 40
Gold-finny 99
Gold-fish 108
Gooſander 70
Gooſe 71
Gordius 130
Gorgonia 206
Goshawk 26
Gourd-worm 126

Page

Grampus 17
Grayling 104, 109
Grayning 109
Grebe 64
Green-finch 37
Green-shank 57
Grosbeak 36
Groundling 103
Grous 50
Gudgeon 107
Guillemot 67
Gull 68
Gurnard 102
Gwyniad 104

H.

Haddock 89
Hæmatopus 63
Hag-fish 110
Hair-worm 130
Hake 91
Haliotis 196
Hare 13
Haw-finch 37
Hawk 28
Hedge-hog 11
Helix 187
Hen-harrier 27
Heron 52
Herring 106
Hinny 15
Hirudo 129
Hirundo 48
Hobby 28
Hog 15
Holibut 95
Holothuria 132
Homo 8
Hoopœ 34
Horn-wrack 209
Horſe 14
Hound-fish 112
Hydatids 126
Hydra 218

J.

Jackdaw 31
Jay 31
Ibis 54
Jerſalcon 56

Page
John doree 95
Isis 206

K.

Kestril 27
King-fish 95
King's Fisher 34
Kite 25
Kittiwake 70
Knot 61

L.

Labrus 98
Lacerta 79
Lampern 110
Lamprey 109
Land-rail 63
Lanius 29
Lanner 27
Lap-wing 58
Lark 41
Larus 68
Launce 87
Leech 129
Lepas 144
Leptocephalus 88
Lepus 13
Lernæa 137
Leucophra 226
Limax 132
Limpet 196
Lineus 130
Line-worm 130
Ling 91
Linnet 40
Lizard 79
Lob-worm 128
Loche 103
Loon 67
Lophius 115
Loxia 36
Lumbricus 128
Lug 128

M.

Mackarel 100
Mactra 154
Madrepora 204
Madrepore 204
Magpie 31

Page
Mallard 78
MAN 8
Martin 9. 49
Meduſa 138
Merganser 70
Mergus 70
Merlin 28
Merops 34
Mew 70
Miller's Thumb 94
Millepora 204
Millepore 204
Missel 35
Mitre 170
Mole 10
Monas 230
Monodon 15
Moor-hen 63
Morillon 76
Morris 88
Motacilla 43
Mouſe 11
Mugil 106
Mule 15
Mullet 106
Mullus 101
Murex 173
Mus 11
Muſcicapa 41
Mussel 163
Mya 146
Myoxus 13
Mytilus 163

N.

Nacre 165
Nais 137
Narwhal 15
Natter-jack 80
Nautilus 166
Needle-fish 116
Nereis 134
Nerita. *Nerite* 195
Newt 79
Nightingale 44
Night-Swallow 49
Numenius 55
Nun 71. 167
Nut-cracker 31
Nut-hatch 34

Page

O.

Old Wife 98
Opah 95
Ophidium 88
Ophis 87
Oriolus 32
Oriole 32
Osprey 25
Ostrea 162
Otis 52
Otter 10
Ovis 14
Ouzel 36
Owl 28
Ox 14
Oyster 162
Oyster-catcher 63

P.

Paramecium 227
Partridge 51
Parus 47
Patella 196
Pearl 97
Pecten 161
Pelecanus 77
Pelecan 77
Pennatula 217
Perca 100
Perch 100
Perdix 51
Perriwinkle 179
Petrel 70
Petromyzon 109
Pettichaps 44
Pewit 58
Phalaropus 64
Phalarope 64
Phasianus 50
Pheasant 50
Phoca 8
Pholas 145
Phyfeter 16
Picus 32
Pigeon 42
Pike 105
Pilchard 106
Pinna 165
Pin-tail 75
Piper 102

Page

Pipe-fish 116
Plaise 96
Planaria 126
Platalea 35
Pleuronectes 95
Plover 62
Pochard 75
Podiceps 64
Pogge 95
Polecat 10
Pollack 91
Polype 218
Poor 90
Porpesse 17
Pride 110
Procellaria 70
Ptarmigan 51
Pudding-weed 207
Puffin 66
Purre 60

Q.

Quail 51
Quest 49

R.

Rabbet 13
Raja 110
Rail 63
Rallus 63
Rana 83
Rat 11
Raven 30
Ray 110
Razor-bill 66
Razor-sheath 147
Recurvirostra 66
Red-breast 46
Red-pole 41
Red-shank 51
Redstart 45
Redwing 35
Remora 94
Ring-tail 27
Roach 108
Robin 46
Rockling 98
Roe. Roebuck 14
Roller 31
Rook 30

Page
Rud 108
Ruffe 100
Ruff and Reeve . . . 58

S.

Sabella 202
Salmo. *Salmon* 103
Salmon-trout 103
Samlet 104
Sanderling 62
Sandpiper 58
Saury 105
Scad 101
Scallop 161
Scaup 74
Sciurus 12
Scolopax 55
Scomber 100
Scoter 73
Screech-owl 29
Sea-adder 117
Sea-devil 115
Sea-ear 196
Sea-egg 141
Sea-fan 206
Sea-fig 207
Sea-fox 112
Sea-hare 133
Seal 8
Sea-lemon 133
Sea-lungs 207
Sea-mat 209
Sea-monster 114
Sea-mouse 136
Sea-needle 105
Sea-pen 217
Sepia 138
Sea-pie 63
Sea-purse 207
Sea-serpent 87
Sea-unicorn 15
Sea-urchin 141
Serpula 200
Sertularia 212
Shad 106
Shag 77
Shark 112
Sheep 14
Shewen 103
Shieldrake 74
Ship-worm 202

Page
Shoveller 74
Shrew 11
Shrike 29
Sipunculus 128
Siskin 40
Sitta 31
Skate 110
Slow worm 81
Slug 132
Smear-dab 96
Smelt 104
Smew 71
Snail 132
Snail Shell 187
Snake 80
Snipe 55
Snipe-fish 117
Sole 96
Solen 147
Sorex 11
Sparrow 39
Sparus 97
Spio 137
Spoon-bill 52
Spongia. *Sponge* . . . 208
Sprat 107
Squalus 112
Squirrel 12
Stag 13
Star-fish 139
Starling. Stare 35
Sterna 68
Stickle-back 101
Sting-bull 89
Sting-ray 112
Stoat 10
Stone-chat 46
Stork 53
Strix 28
Strombus 173
Sturgeon 114
Sturnus 35
Sucker 115
Sucking-fish 94
Sun-fish 116
Surmullet 101
Sus 15
Swallow 58
Swan 71
Swift 49
Swine 15

Page
Sword-fish 88
Sylvia 44
Syngnathus . . . 116

T.

Tænia 126
Talpa 10
Tantalus 54
Tape-worm 126
Teal 77
Tellina 149
Tench 108
Terebella 132
Teredo 202
Tern 68
Testudo 78
Tetrao 50
Tetrodon 116
Thistle-finch . . . 40
Thornback 111
Throstle 35
Thrush 35
Titmouse 47
Toad 80
Tomtit 48
Tope 112
Top-shell 177
Tooth-shell 198
Torpedo 110
Torsk 92
Tortoise 78
Trachinus 89
Trichocephalus . . . 126
Trichoda 222
Trigla 102
Tringa 58
Triton 138
Trochus 177
Trout 103
Trumpet-fish . . . 117
Tube-worm 128
Tubularia 210
Tunny 101
Turbo 178
Turbot 97
Turdus 35
Turn-stone 61
Turtle 78
Turtle-dove 50
Twite 41

Page

V.

Venus 156
Venus's fan 206
Vermiculum 199
Vespertilio 8
Vibrio 228
Viper 80
Viverra 9
Volvox 230
Voluta 170
Vorticella 219
Upupa 34
Urchin 11
Uria 67
Ursus 10

W.

Wagtail 43
Warbler 44
Weesel 9
Weever 89
Whale 15
Wheat-ear 46
Whelk 171. 173
Whiff 97
Whimbrel 55
Whinchat 46
White-bait 109
White-throat . . . 45
Whiting 91
Whiting-pout . . . 90
Wigeon 75
Wolf 9
Wolf-fish 87
Wood-chat 20
Woodcock 56
Wood-pecker . . . 32
Wrasse 98
Wreath-shell . . . 178
Wren 47
Wryneck 32

X.

Xiphias 88

Y.

Yellow-hammer . . . 38
Yunx 32

Z.

Zeus 95

ADDITIONS AND CORRECTIONS.

P. 10. Under Talpa *europæa*, insert

Var. 2. White, with rusty red throat and belly.
Var. 3. Spotted black and white.

Both theſe varieties were taken, in the ſpring 1807, at Kyllemaenllwyd in Caermarthenshire, the ſeat of John Rees, Esq.

P. 25. After Turdus *iliacus*, insert

63.* T. *gularis*. Above dusky-brown, beneath white with a dusky bar across the bottom of the throat: vent rusty-yellow, with black bars.

Penrith Ouzel. *Latham Synops.* ii. *p.* 177. *n.* 2.

Body larger than T. *Cinclus*, above dusky-brown: *chin* and *throat* white, with a dusky bar at the bottom of the latter: *breast*, *belly*, and *thighs* white, with short black streaks pointing downwards, more numerous towards the lower belly and thighs: *vent* yellowish, barred with black: *legs* rusty-yellow.

Obs. This ſpecies is added by Dr. Latham, from Mr. Pennant's notes of a Journey from Downing to Alston Moor, in which is painted a figure of the bird.

Title-page in the quotation, for *prinicipio* read *principio*.
Page 15, line 32, for *blaek* read *black*.
15, 34, for *lobcs* read *lobes*.
35, 9 from the bottom, for *reddish-oranpe* rd. *reddish-orange*
87, 4 from the bottom, for *t.* 32 read *t.* 33.
103, 5, for *unarmed* read *head unarmed*.
107, 41, for *Shaw Zvol.* read *Shaw Zool.*
108, 5 from the bottom, for *co-* read *covered*.
118, *n.* 5. for FACIOLA read FASCIOLA.
118, *n.* 10. place HIRUDO in the division b. *Without the lateral pore.*
Page 124, last line, for 62 read 92.
129, line 25, *Horse-leech* place under H. *sanguisuga*.
138, 7 from the bottom, for *t.* 8. *f.* 5. read *t.* 7. *f.* 2.
141, 3, for A. *sphærulala* read A. *sphærulata*.
167, 19, for *joinst* read *joints*.
171, 36, for *operture* read *aperture*.
204, 17, for *psrtitions* read *partitions*.

J. EVANS, PRINTER,
Wind-Street.